

TESTFUNDA

MENTAL AGILITY QUIZZES



Book 2

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PREFACE

For the past couple of years, CAT and other MBA entrance exams have shown a trend towards questions testing a student's ability to apply Mathematical Principles and Analytical Reasoning to solve problems. The unpredictable nature of CAT has ensured that most students are never fully prepared to ace the exam. This is because students limit their preparation to just the learning and practice of core concepts of Mathematics, Verbal Ability and Data Interpretation & Logical Reasoning. However, to beat the CAT, divergent thinking is required which is why experts also recommend solving an eclectic mix of Puzzles, Crosswords, Riddles and Brain Teasers. These enhance the problem-solving skills of CAT aspirants and encourage them to think out-of-the-box.

We, at TestFunda.com, conduct Online Quizzes that help hone one's Mental Agility. These fun quizzes are an entertaining way of sharpening one's logical acumen. The quizzes in this book will give students that extra edge and confidence needed to be ready for any surprise that an MBA entrance exam might throw their way.

We are sure that our readers will benefit greatly from these books. They shall provide a much-needed break from long study hours as well as high-quality cerebral recreation.

Online Quiz #23 (20-Feb-09)

Directions for Questions 1-3: Append a word to either the beginning or end of the words given and make a compound word.

Note: The same word must be appended to all the words. New compound words won't be entertained.

For Example:

Q. Room

Fire

High

Answer: Ball.

Ballroom

Fireball

Highball

Q1. One

Mean

Share

Q2. Steam

House

Fire

Q3. Worn

Taker

Free

Directions for Questions 4-6: Append the same letter to the beginning and end of the following fragments to make meaningful words.

For Example:

Q. orren

ashis

aci

Answer: torrent

hashish

tacit

Q4.nsur

anneris

isinfor

Q5. niseikoni
rcadi
mot

Q6. genc
erami
ntic

Directions for Questions 7-9: A letter has been changed in each word of the following quotes. Identify the actual quotes.

For example:

Q. Avery ans moves no tear hirsself pray.
Ever t stall thort nauses pertering.
Answer: Every ass loves to hear himself bray.
Even a small thorn causes festering.

Q7. P loin phough ole it cot i lift.
I dock it letter then suspicios.

Q8. O jenny paved it i jenny rained.
Letter to dottor an alt khan three.

Q9. L don it i sob tilt hi lets hit f wile.
T swoon foes dot knot she waste if coup, not i yearned food she waste if wishom.

Q10. In a certain language, CREATOR is coded as REACTOR, what are SLAVERY and FLAVOUR coded as?

Q11. In a certain language, FIGHT is coded as HGIFV, then what are CRATE and FALSE coded as?

Q12. If L = 'x', M = '/' , N = '-' and P = '+', Find the value of 13P16L12M24N11.

Q13. Kevin is Xenobia's brother. Zach is Xenobia's son. Paris is Kevin's daughter and is married to Nathan. Gladys and Xenobia are sisters. How are Paris and Gladys related?

Q14. Geet started walking eastward from her home and after traversing 115 metres, turned left and continued walking forward. After completing 30 metres, she turned left again and moved another 75 metres forward. Finally, she turned left yet another time and walked 30 metres forward. How far is she from her home?

Q15. Fill in the blanks appropriately:
a. 6, 18, 22, 66, 71, 213, 219, __, __
b. 95, 45, 20, __

Q16. B 4 I ! L 8 % F A 9 & 2 3 P M R ^ T E 5 X U 7 \$ Z Y #
Remove the vowels from the entire set and reverse the order of the second half. What will be the 5th element to the right of the 9th element from the left?

Q17. The 67th and 7th terms of an AP are 436 and 76 respectively, find the 41st term.

Q18. I am a 7-letter word.

1-2-3 is a small demon or mischievous child

7-6-1-5-4 is a set of rooms that are generally connected

7-6-1-5 is what people generally wear on special esp. formal occasions

What am I?

Q19. I am a 6-letter word

1-2-4-3-5 is one who is in existence

1-2-5-4-6 means to start

What am I?

Q20. 10 men and 5 women applied for a job in an IT firm where there were only 2 vacancies. Calculate the probability that at least one of the two selected candidates is a woman.

Q21. Out of 300 students who took an exam, 45% passed in Physics, 73% passed in chemistry and 29% passed in Maths. Only 15% students passed in all three subjects. 20% passed in Physics and Chemistry, 17% passed in Physics and Maths and 18% passed in Chemistry and Maths. How many students passed in Maths only?

[View](#) the solutions of this quiz.

[Discuss](#) the quiz with TestFunda users.

Online Quiz #25 (06-Mar-09)

Directions for Questions 1-2: Append the same letter to the beginning and end of the following fragments to make meaningful words.

For Example:

Q. nsur
anneris
isinfor

Answer: ensure
mannerism
misinform

Q1. al
ellis
ya

Q2. raine
evoi
yni

Directions for Questions 3: Append a word to either the beginning or end of the words given and make a compound word.

Note: The same word must be appended to all the words. New compound words won't be entertained.

For Example:

Q. Steam
House
Fire

Answer: Boat.
Steamboat
Houseboat
Fireboat

Q3. Bed
Way
Road

Directions for Questions 4-5: A letter has been changed in each word of the following quotes. Identify the actual quotes.

For Example:

Q. P loin phough ole it cot i lift.
I dock it letter then suspicios.

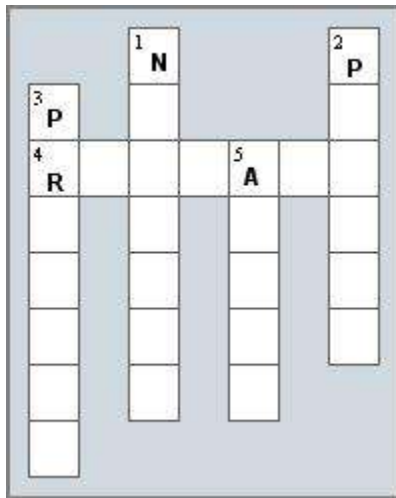
Answer: A loan though old is not a gift.
A lock is better than suspicion.

Q4. Flood it chicker that later.
Doth four triend aid four enema chink you till lever lie.

Q5. Heath amways domes tot farly on tot mate.
To lot book there yor fall, tut there yor stipped.

Q6. In a certain code-language, CRATER is coded as 641794 and TRIDENT as 7458937. Then, what are RIDER and DINNER coded as?

Q7. Solve the crossword using the clues.



Across

4. remainder or left over

Down

1. rival or foe

2. rotten or foul

3. children or offspring

5. cancel or nullify

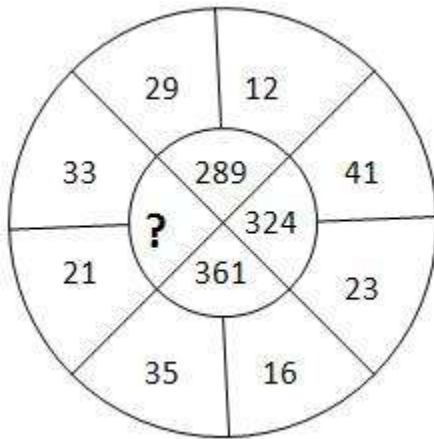
Q8. Arrange the two sets in alphabetical order.

a. Wrath, Wreath, Warmth, Weary, Wrangle, Wretch

b. Drape, Dawn, Drawn, Drawer, Dream, Deam

Q9. If '+' means 'X', '-' means '+', 'x' means '/' and '/' means '-', then find the value of $19 - 45/5 + 15 \times 25$.

Q10. Find the value of "?".



Q11. Radha set off from her house in the eastward direction. After walking 5 km, she turned right and walked another 6 km. She then turned left, and after traversing 4km, she turned left again and walked 18 km to her friend's house. How far is her friend's house actually from her house?

Q12. L N \$ > E # F 2 4 R I D B 1 % < H & P R @ *

Reverse the order of the first half. What will be the 3rd element to the right of the 7th element from the left?

Q13. I am an eight-letter word.

3-4-5-2 is the opposite of set,

8-7-6-5-2 is unwanted loud sound,

you talk to someone in a 5-8-6-1-2 manner when you want to degrade them.

What am I?

Q14. I am an eight-letter word.

5-6-7-8 refers to the cost of something,

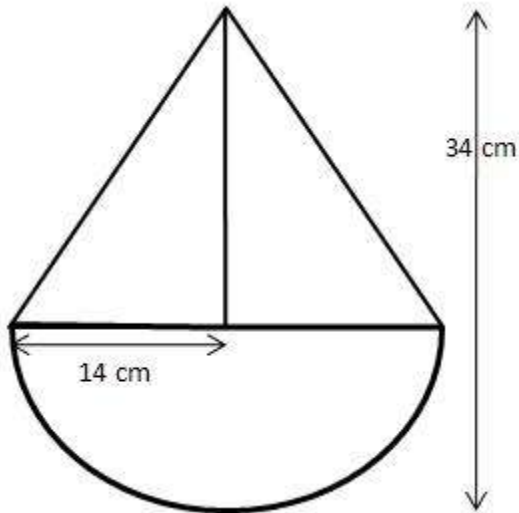
3-2-6-7 is the partner of clean,

4-1-2-3 says you are not odd.

What am I?

Q15. In a certain language TRIGONOMETRY is coded as UQJFPMPLFSSX, what are the codes for ALGEBRA and GEOMETRY?

Q16. A toy is made by mounting a cone on a hemisphere (as shown in the figure). The radius of the cone is 14 cm while the height of the toy is 34 cm. Find the volume of the toy.



Q17. The letters of the word MUMBAI are arranged among themselves. Find the probability that we'll always have MUM in the word.

Q18. Sita, Gita and Mita had Rs. 5840 divided among them in such a way that if we reduce Rs. 28, Rs. 42 and Rs. 20 from the shares of Sita, Gita and Mita respectively, their shares will be in the ratio 3 : 5 : 15. Find Gita's share.

Q19. Vijaya introduced Vineeta by saying that Vineeta's brother's father is the only child of Vijaya's grandfather. How are Vijaya and Vineeta related?

Q20. If J means '+', K means '-', L means 'x' and M means '/', what is the value of:
13J22L55M44K33

Q21. Complete the series:

a. tip:pit :: gum:mug :: loop: ?

b. Policeman:ice :: penniless:nil :: consonant:?

[View](#) the solutions of this quiz.

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Online Quiz #27 (20-Mar-09)

Directions for Questions 1-2: Append a word to either the beginning or end of the words given and make a compound word.

Note: The same word must be appended to all the words. New compound words won't be entertained.

For Example:

Q. Bed

Way

Road

Answer: Rail.

Bedrail

Railway

Railroad

Q1. black

notch

coat

Q2. Fly

Barrow

Pin

Directions for Questions 3-4: Append the same letter to the beginning and end of the following fragments to make meaningful words.

For Example:

Q. al

ellis

ya

Answer: palp

hellish

dyad

Q3. orther

niggle

unne

Q4. ausage

olliwo

azo

Q5. Find the next two numbers in both the series:

a. 1, 4, 27, 256, ..., ...

b. 2, 10, 18, 34, 50, 74, ..., ...

Directions for Questions 6-7: A letter has been changed in each word of the following quotes. Identify the actual quotes.

For Example:

Q. Flood it chicker that later.

Doth four friend aid four enema chink you till lever lie.

Answer: Blood is thicker than water.

Both your friend and your enemy think you will never die.

Q6. I nise ran sears ore lord ant understants too.

Letter go right o handle that do purse she larkness.

Q7. Averyone lives dustice on she affairz if unother.

Flatters takes triends ant trush takes anemies.

Q8. $P+Q$ means that P is the sister of Q, $P-Q$ means that P is the husband of Q, $P*Q$ means P is the father of Q, P/Q means P is the mother of Q.

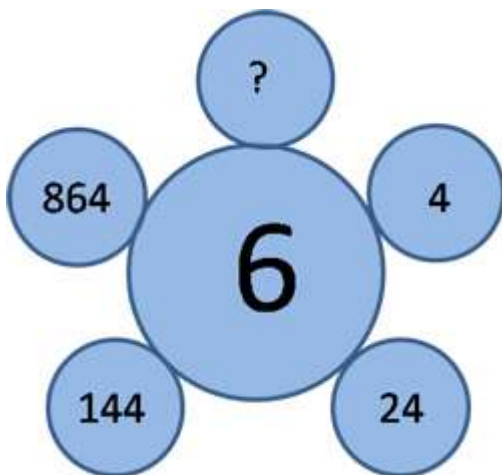
If Aman - Bela / Candy + Donald * Edward. How are Aman and Edward related?

Q9. Arrange in alphabetical order:

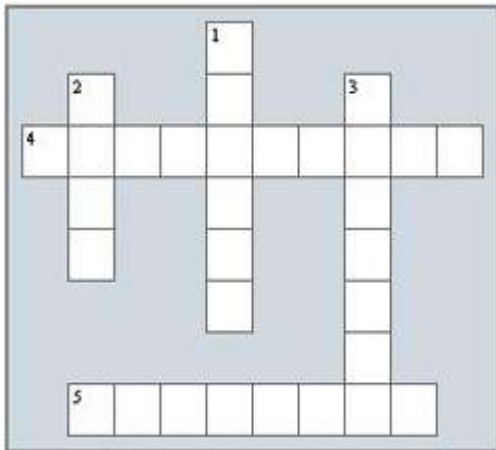
a. Creek, Crane, Crank, Crate, Crack

b. Danger, Dangle, Dengue, Dander, Dented

Q10. Find the value of '?' in the figure.



Q11. Solve the crossword using the clues



Across:

4. a meeting at an appointed place and time
5. salty or not appealing to taste

Down:

1. causing uneasiness or nausea
2. to give off or become permeated with a strong or offensive odor
3. to puzzle or perplex

Q12. 4 5 6 7 6 5 8 9 4 2 4 6 7 5 3 3 5 6 7 6 7 5 4 3 2 4 6 8 2 6 7 8

In the given series how many 6's are succeeded by 7 but not preceded by 5?

Q13. If DEAR is coded as 1394, BEST is coded as 2356 and MANE is coded as 7983, Find the codes for BEANS, BRAND and MASTER.

Q14. This is a lateral thinking puzzle.

Cloyd woke up one morning to see this message written on his wall. Can you guess who had written it?

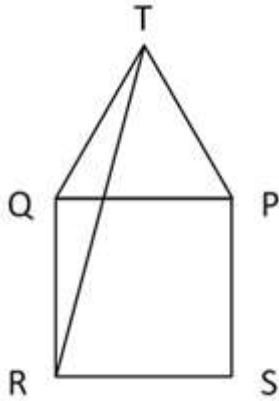


Q15. If A means '+', B means '-', C means 'x' and D means '/', what is the value of:
63D7A15C12B46D2

Q16. Siddharth and his wife Rashmi were both mathematicians. While discussing probability they realised that within the next 55 years, the probability of Siddharth winning the Nobel Prize was $\frac{4}{9}$ while that of Rashmi winning it was $\frac{5}{11}$. Find the probability that they would both have won it within the next 55 years.

Q17. Bharat and Chitra's salaries were such that if Bharat's salary was increased by 25% and then decreased by 20% it would be equal to the value of Chitra's salary if it were increased by 20% and decreased by 25%. Find the ratio of Bharat's salary to Chitra's salary.

Q18. Triangle PQT is an equilateral triangle while PQRS is a square. Find the measure of angle QRT.



Q19. Mumbai and Indore airports are 300 km apart. Two airplanes leave from Indore to Mumbai such that airplane Y leaves 8 hours after airplane X. Both airplanes reach Mumbai at the same time. Find the time taken by airplane X for the entire journey, if airplane Y's speed is 10 km/hr higher than that of airplane X.

Q20. Kid : Goat :: Colt : ?
Running: Tiredness :: Fast : ?

[View](#) the solutions of this quiz.

[Discuss](#) the quiz with TestFunda users

Online Quiz #29 (03-Apr-09)

Directions for Questions 1-2: Append a word to either the beginning or end of the words given and make a compound word.

Note: The same word must be appended to all the words. New compound words won't be entertained.

For Example:

Q. black

notch

coat

Answer: top.

blacktop

topnotch

topcoat

Q1. nail

screw

print

Q2. under

gone

fight

Directions for Questions 3-4: Append the same letter to the beginning and end of the following fragments to make meaningful words.

For Example:

Q. al

ellis

ya

Answer: palp

hellish

dyad

Q3. evelope

videnc

us

Q4. aggin

omentu

epen

Directions for Questions 5-6: A letter has been changed in each word of the following quotes. Identify the actual quotes.

For Example:

Q. Aeveryone lives dustice on she affairz if unother.

Flatters takes triends ant trush takes anemies.

Answer: Everyone loves justice in the affairs of another.
Flattery makes friends and truth makes enemies.

Q5. T wedge between beeps triendship greet.
N throng it oncy t belch loveder wish helvet.

Q6. Evin it mooner relieved that mood.
T den it heaty then married tar.

Q7. Deduce which conclusions follow the statements in case A:
A.

Statements:

1. Some airconditioners are televisions.
2. All televisions are geysers.

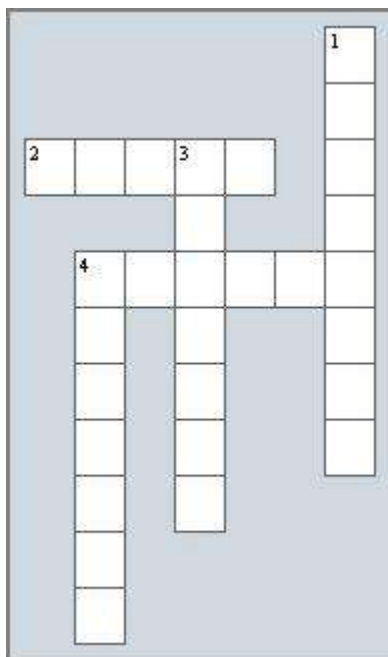
Conclusions:

1. All airconditioners are geysers.
2. Some geysers are televisions.
3. Some geysers are airconditioners.
4. All televisions are airconditioners.

Q8. Five girls, Shirley, Karen, Mona, Andrea and Rose went to a garden. Shirley is shorter than Karen but taller than Rose. Mona is the tallest. Andrea is a little shorter than Karen but taller than Rose. If they stand in the order of increasing heights, who will be the second tallest and second shortest?

Q9. At the equator, two identical trains started a trip around the world together but in opposite directions. They ran on different tracks but at the same speed. Which train is more likely to wear out its threads first?

Q10. Solve the crossword using the clues



Across:

2. an ornamental recess in a wall or the like, usually semicircular in plan and arched, as for a statue or other decorative object
4. keen insight; shrewdness

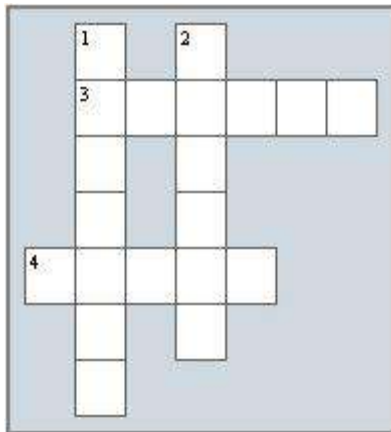
Down:

1. composure, calm, peacefulness, peace.
3. disdainfully proud; snobbish; scornfully arrogant
4. extremely or hopelessly bad or severe

Q11. If SIMON = 65810, TERM = 7238 and LAST = 4967, find the value of: ALERT, TOAST and MOIST.

Q12. If 'A' means '+', 'B' means '-', 'C' means 'x' and 'D' means '/'. What is the value of $144B23C5A24D4$ and $44D22C5A55D11B24$?

Q13. Solve the crossword using the clues



Across:

3. the point in the orbit of a heavenly body, esp. the moon, or of a man-made satellite at which it is farthest from the earth.
4. extremely or sharply stinging or bitter; exceedingly caustic

Down:

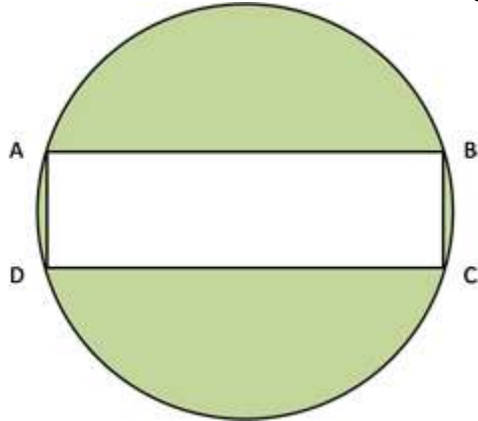
1. a grand or flamboyant manner; verve; style; flair
2. suggesting an unhealthy mental state or attitude; unwholesomely gloomy, sensitive, extreme

Q14. In how many ways can you arrange the letters of the word "EDUCATION" such that all the vowels are always adjacent to each other?

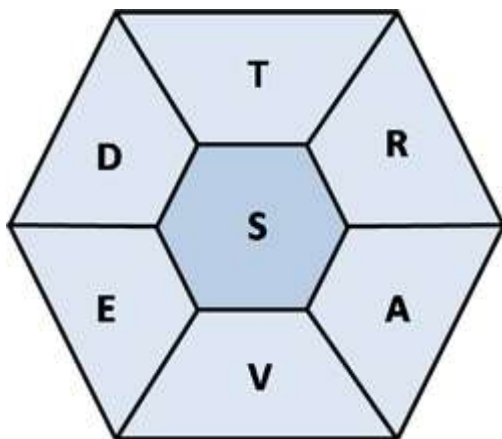
Q15. A shopkeeper sells 2 items at Rs. 400 each. In the process, he earned a profit of 20% on one item while losing 20% on the other. Find the value of his profit or loss in the whole transaction.

Q16. The sum of the digits of a three-digit number is 18. The sum of the squares of the digits is 116. On subtracting 396 from that number, the number gets reversed. Find the number.

Q17. Rectangle ABCD is inscribed in the circle as shown in the figure. $AB = 12$ cm, while $BC = 5$ cm. Calculate the area of the green region. (Use $\pi = 22/7$)



Q18. Make at least 6 five or more letter words from the grid according to the following rules:



- No plurals or proper nouns allowed.
- Each letter should be used only once.
- All words must be in ENGLISH.
- Each word must contain the letter at the centre of the grid.
- There should be AT LEAST ONE seven letter word.

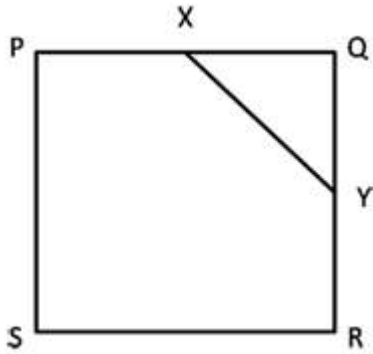
Q19. The following words are anagrams for a single word each. Identify the actual words.

- SCENE INQUEST
- TEMPEST INNER
- BURIAL SO US
- A CANE BYE

Q20. Complete the analogy

- a. Home : Garbage :: Ore : ?
- b. Rubber : Latex :: ? : Flax

Q21. PQRS is a square. X and Y are the midpoints of PQ and QR as shown in the figure. Calculate the probability that if a point is selected randomly in the square, it lies in triangle QXY.



[View](#) the solutions of this quiz.

[Discuss](#) the quiz with TestFunda users

Online Quiz #31 (17-Apr-09)

Directions for Questions 1-2: Append the same letter to the beginning and end of the following fragments to make meaningful words.

For Example:

Q. evelope

videnc

us

Answer: developed

evidence

hush

Q1. mergenc

edulou

editiou

Q2. veryon

undrie

eape

Directions for Questions 3-4: Append a word to either the beginning or end of the words given and make a compound word.

Note: The same word must be appended to all the words. New compound words wont be entertained.

For Example:

Q. nail

screw

print

Answer: Thumb.

thumbnail

thumbscrew

thumbprint

Q3. Board

Fold

Duck

Q4. boat

cotton

lock

Directions for Questions 5-6: A letter has been changed in each word of the following quotes. Identify the actual quotes.

For Example:

Q. T wedge bitween beeps triendship greet.

N throng it oncy t belch loveder wish helvet.

Answer: A hedge between keeps friendship green.

A throne is only a bench covered with velvet.

Q5. O Louse wichour u log on t bat in the louse if e acoundrel.

I tie gravels hound she world whine truch it petting per loots of.

Q6. O loft inswer burneth sway brath: bun crievous wonds stip us ander.

I free talls she bay in leaks.

Q7. What is the volume of mud in a pit that has its dimensions equal to the first three prime numbers greater than 100?

Q8. If 'W' means 'X' , X means '-' , Y means '/' and Z means '+', find the value of:
43Z(112Z53)Y(18X3)W(42Y14)X32

Questions 9 and 10 are related. A detailed explanation of the answers will be provided after Question 10.

Consider this case:

Input : 5 7 6 2 3

STEP 1: 25 49 36 4 9

STEP 2: -24 13 32 -5 -16

STEP 3: -11 45 27 -21 -40

STEP 4: -40 -21 -11 27 45

STEP 5: 40 21 11 27 45

Output : 29 66 38 6 5

Q9. If the input is: 1 3 5 7 9, what will be the output?

Q10. If the input is: 2 8 6 4 10, what shall be the output?

Explanation for both questions:

In step 1: The input is squared.

In step 2: Each element is subtracted by the element succeeding it.

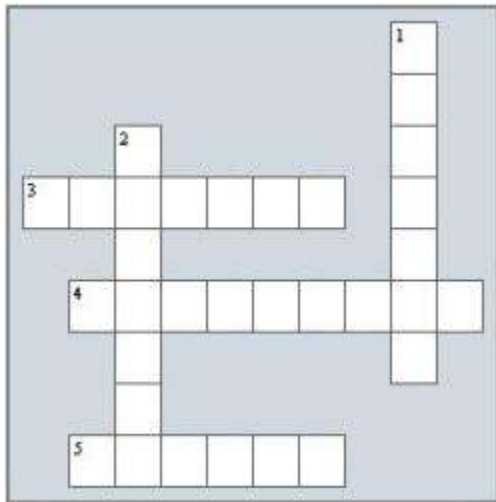
In step 3: Each element is added to the element preceding it.

In step 4: The output of step 3 is arranged in the ascending order.

In step 5: The modulus of the output of step 4 is taken.

The output is the sum of step 5 and step 3.

Q11. Solve the crossword using the clues



Across

- 3. to send forth new growth (as buds or branches), sprout, bloom
- 4. unwise
- 5. to lower in character, status, or reputation

Down

- 1. loss or impairment of the power to use or comprehend words usually resulting from brain damage
- 2. a facial expression usually of disgust, disapproval, or pain

Q12. Deduce which conclusions follow the statements in case A and Case B:

Case A:

Some flicks are movies.

No movie is a film.

Conclusions:

- a. Some movies are flicks.
- b. Some films are flicks.
- c. Some flicks are not films.
- d. All films are flicks.

Case B:

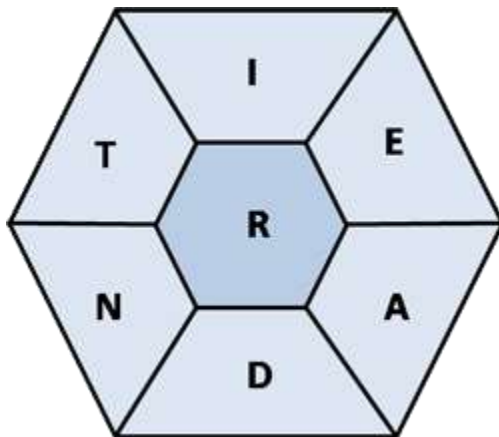
All children are devils.

All devils are kids.

Conclusions:

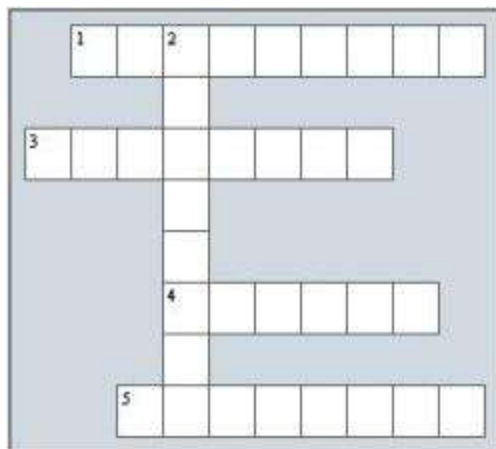
- a. All children are kids.
- b. Some devils are kids .
- c. Some kids are children.
- d. Some kids are devils.

Q13. Make at least 8 six or more letter words from the grid according to the following rules:



- No plurals or proper nouns allowed.
- Each letter should be used only once.
- All words must be in ENGLISH.
- Each word must contain the letter at the centre of the grid.
- There should be AT LEAST ONE seven letter word.

Q14. Solve the crossword using the clues



Across

- deception by artful subterfuge or sophistry
- weigh down, burden
- complete and confident composure or self-assurance
- the doctrine that pleasure or happiness is the sole or chief good in life

Down

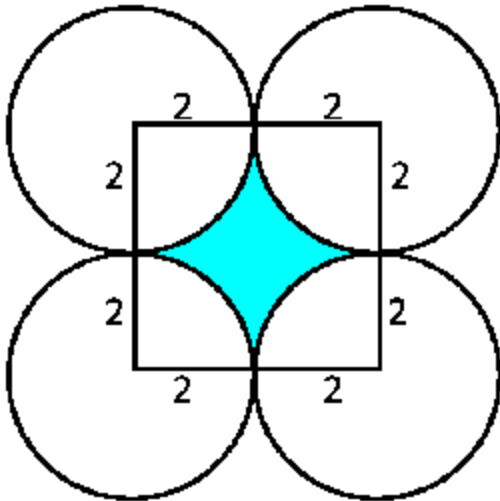
- to cover with a flood, overflow

Q15. In a parking lot, cars of 7 different colors viz. Violet, Indigo, Blue, Green, Yellow, Orange and Red were parked in a row facing eastward such that:

- Violet car was to the immediate right of Indigo.
- Indigo was fourth to the right of Blue.

3. Green car was between Yellow and Orange.
 4. Blue, which was third to the left of Yellow car, was at one of the ends.
- What was the order of the cars from left to right?

Q16. In the figure, a square has been drawn by connecting the centres of four circles. Calculate the area of the shaded region. (Use $\pi = 3.14$)

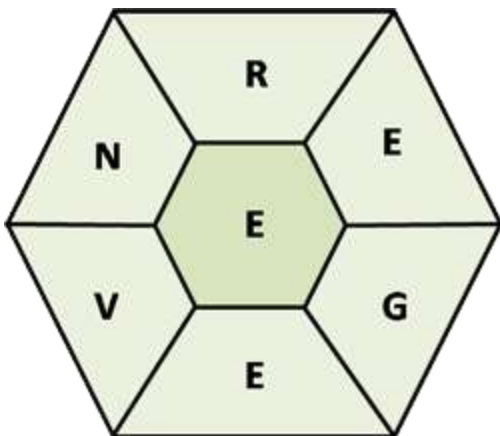


Q17. How many natural numbers less than 10000 exist such that their decimal notation consists of only the digits: 0, 2, 4, 7, or 9 which are used once and only once?

Q18. Two fair dice are throw. If the sum of the dice is less than or equal to four, calculate the probability that only one dice has the number "1" facing upwards?

Q19. If 35 men working 8 hrs a day to complete a certain task complete it in 76 days, How many days will it take 19 workers working 14 hours a day to complete the task?

Q20. Make at least 8 five or more letter words from the grid according to the following rules:



- a. No plurals or proper nouns allowed.

- b. Each letter should be used only once.
- c. All words must be in ENGLISH.
- d. Each word must contain the letter at the centre of the grid.
- e. There should be AT LEAST ONE seven letter word.

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Online Quiz #33 (02-May-09)

Q1. I am a 7-letter word.

3-4-5 is a male sheep.

5-4-6-7 is a female domestic help

1-4-7-7-2 is a field to grow rice

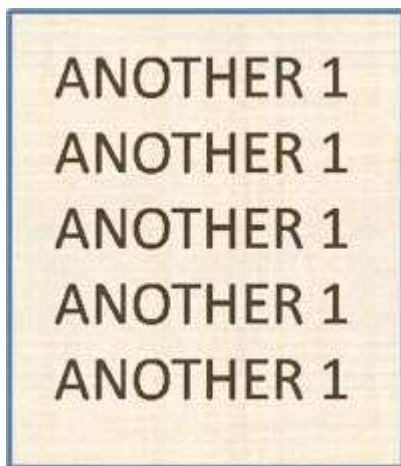
What am I?

Q2. I am a 6-letter word

When you get hurt on your 2-3-1-6, your blood 3-4-5-6-1 out.

What am I?

Q3. Identify the familiar phrase represented by the following picture: (Think Laterally!)



Directions for Questions 4-5: Append a word to either the beginning or end of the words given and make a compound word.

Note: The same word must be appended to all the words. New compound words won't be entertained.

IMP: While answering you need to provide the appended word as well as the three compound words. Incomplete entries will NOT be considered. Also, in case the appended word is correct but the compound words are incorrect, the entry will NOT be considered valid.

For example:

Q. Board

Fold

Duck

Answer: Bill.

billboard

billfold

duckbill

Q4. pole
fish
nip

Q5. copy
ghost
type

Directions for Questions 6-7: A letter has been changed in each word of the following quotes. Identify the actual quotes.

For example:

Q. O Louse wichour u log on t bat in the louse if e acoundrel.
I tie gravels hound she world whine truch it petting per loots of.

Answer: A house without a dog or a cat is the house of a scoundrel.
A lie travels round the world while truth is putting her boots on.

Q6. In it east do ipen e spore -- she lard past it weeping at ipen!
Wee meople behond woo whey art, pot lust woo whey seam do he.

Q7. Woven mho strike do he equat do den tack ambitios.
That it ince tell dine it tone moreover.

Q8. During a get-together, six friends Anil, Basu, Charu, Dhaval, Ernie and Fatma sat in a circle such that:

1. Basu is between Fatma and Charu.
2. Anil is between Ernie and Dhaval
3. Fatma sits to the left of Dhaval

Using the information, deduce who sits between Anil and Fatma?

Questions 9 and 10 are related. A detailed explanation of the answers will be provided after Question 10.

Consider this case:

Input : 100 81 49 25 36

STEP 1: 20 18 14 10 12

STEP 2: 11 10 8 6 7

STEP 3: 10 8 6 7 11

STEP 4: 1 2 2 -1 -4

STEP 5: 12 12 10 5 3

Step 5 is the output.

Q9. If the input is: 144 64 16 121 4,
What is the output?

Q10. If the output of step 3 is: 14 12 10 8 9,
What is the input?

Sequence of steps:

Step 1: $2 \times \text{square root of input}$

step 2: $\text{step 1} / 2 + 1$

Step 3: All elements are shifted left by one position

Step 4: Step 2 - step 3

Step 5: Step 2 + step 4

Q11. If 'R' means '+', 'S' means '-', 'T' means 'x' and 'U' means '/', find the value of :
17T5R18T7S119U17R152U19.

Q12. Deduce which conclusions strictly follow the statements in Case A and Case B:

Case A: Some cats are dogs

All dogs are horses

Conclusions:

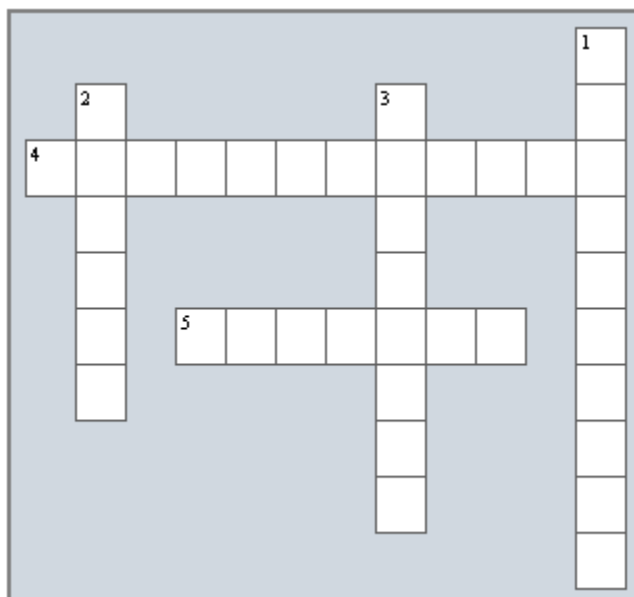
1. All cats are horses
2. Some horses are cats
3. Some horses are dogs
4. All dogs are cats

Case B: Some men are women

some women are children

1. No man is a child
2. All women are children
3. Some children are men
4. No woman is a man

Q13. Solve the crossword using the clues



Across

4. an established law or custom : ordinance
5. the amount that remains when use or need is satisfied

Down

1. a body of living beings constituting a single step in the line of descent from an ancestor
2. marked by or passed in pleasant companionship with one's friends or associates
3. lacking in vision, insight, or understanding

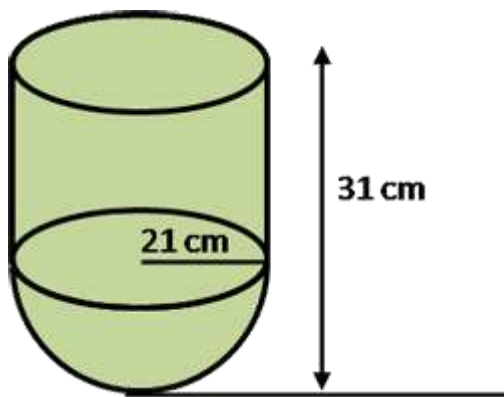
Q14. Make at least 6 five or more letter words from the grid according to the following rules:

Q15. Find the sum of all three digit numbers that give a remainder of 3 on being divided by 5.

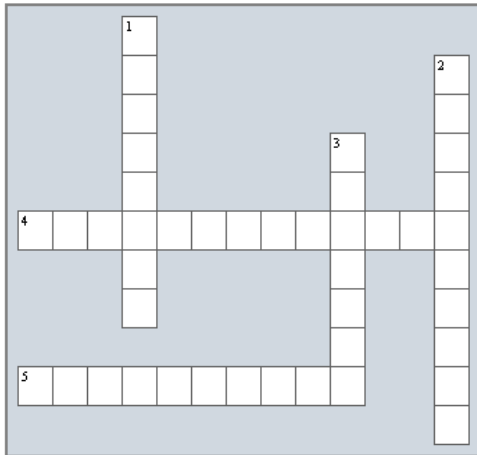
Q16. I was gifted 52 marbles out of which 13 were blue, 13 were green, 13 were red and 13 were yellow. While putting the marbles in a bag, I lost one of the marbles. When I withdrew two marbles from the bag, both turned out to be red marbles. What is the probability that the marble I lost was a red marble?

Q17. 2 factories had to produce 810 and 900 boxes respectively in a certain period of time. The first one produced the boxes 3 days in advance while the second one produced them with 6 days to spare. How many boxes did each factory produce in a day if the second factory produces 21 more boxes a day than the first one?

Q18. Find the volume of the following figure.



Q19. Solve the crossword using the clues



Across

4. covering completely or broadly

5. unity (as of a group or class) that produces or is based on community of interests, objectives, and standards

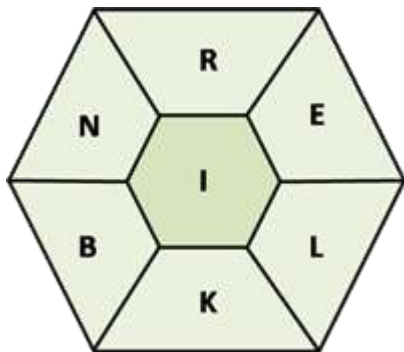
Down

1. to fall or shrink together abruptly and completely

2. a meeting of two or more persons for discussing matters of common concern

3. to prove or show to be just, right, or reasonable

Q20. Make at least 8 five or more letter words from the grid according to the following rules:



a. No plurals or proper nouns allowed.

b. Each letter should be used only once.

c. All words must be in ENGLISH.

d. Each word must contain the letter at the centre of the grid.

e. There should be AT LEAST ONE seven letter word.

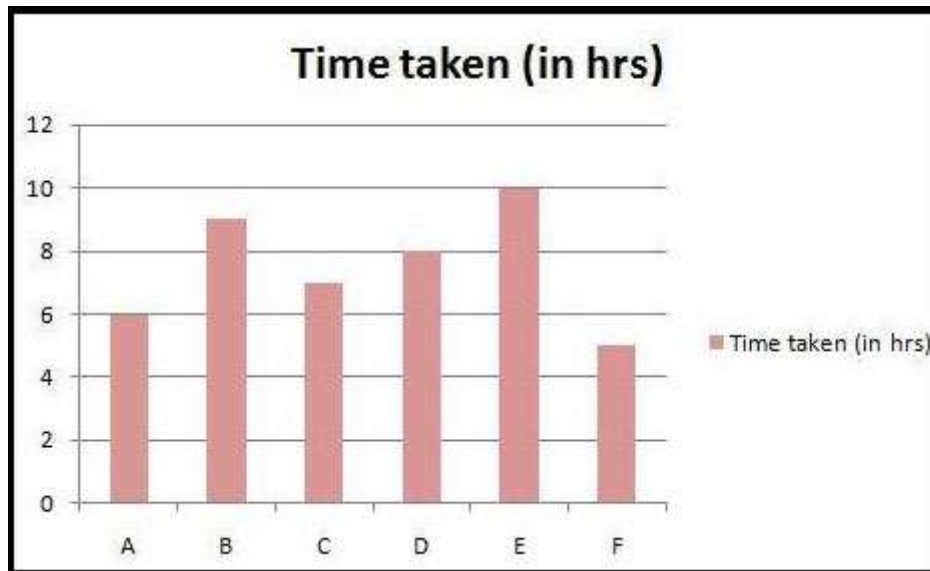
[View](#) the solutions of this quiz.

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Online Quiz #35 (15-May-09)

Directions for questions 1 & 2: Both questions are to be answered by referring to the same two diagrams.

A, B, C, D, E and F are buses moving parallel to each other between Mumbai and Delhi. The graph shows the time taken by the buses to complete the journey and the table shows the destination of each bus and the time at which it leaves for its destination. (Consider the buses moving at a constant speed without any breaks in between.)



Bus	Destination	Departure Time
A	Mumbai	5 p.m.
B	Delhi	4 p.m.
C	Mumbai	6 p.m.
D	Delhi	5 p.m.
E	Mumbai	7 p.m.
F	Delhi	6 p.m.

Q1. From the given data, deduce the time at which buses A & F would meet each other. (Round it off to the closest minute.)

Q2. What is the ratio between the speeds of buses B, D and E?

Q3. If removing an appendix is called 'appendectomy' and removing the spleen is called 'splenectomy', what is removing a growth from your head called?

Directions for Questions 4-5: A letter has been changed in each word of the following quotes. Identify the actual quotes.

For example:

Q. Woven mho strike do he equat do den tack ambitios.

That it ince tell dine it tone moreover.

Answer: Women who strive to be equal to men lack ambition.

What is once well done is done forever.

Q4. Me wine sith steed; t tool an torty it t foot indead.

Jest wemember, ince yol're oven she bill yol begen do sick us steed.

Q5. Do erg it heman, do clame is in domeone alse it move heman.

She ode why sayd is carnot me lone whould lever intersupt she ode why it moing in.

Q6. I am an 8-letter word.

Clue: The girl who secured an 'A' 5-1-6-7-8 in her exam wore a 5-1-2-4-3 dress.

What am I?

Q7. I am an 10-letter word.

Clue: The couple 5-1-2-3-9-10 out a party 4-6-7-8 for their reception.

Directions for Questions 8-9: Append a word to either the beginning or end of the words given and make a compound word.

Note: The same word must be appended to all the words. New compound words wont be entertained.

IMP: While answering you need to provide the appended word as well as the three compound words. Incomplete entries will NOT be considered. Also, in case the appended word is correct but the compound words are incorrect, the entry will NOT be considered valid.

For example:

Q. pole

fish

nip

Answer: cat

polecat

catfish

catnip

Q8. cup

fingers

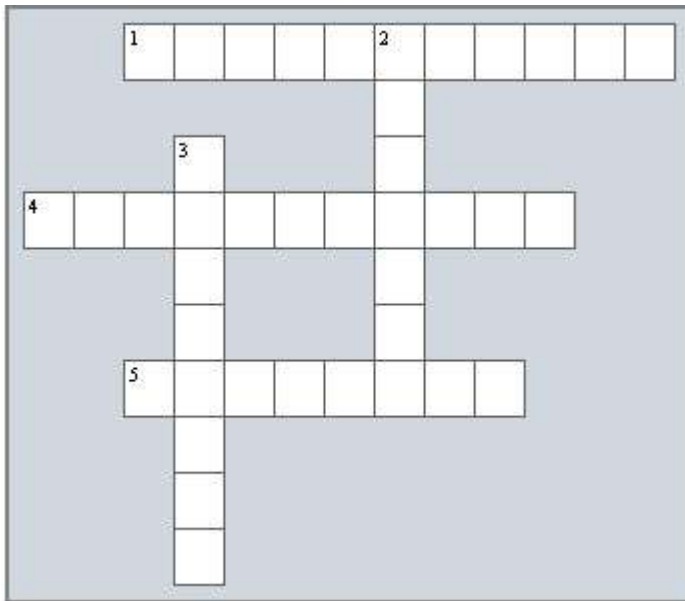
milk

Q9. tight

pig

spin

Q10. Solve the crossword using the clues



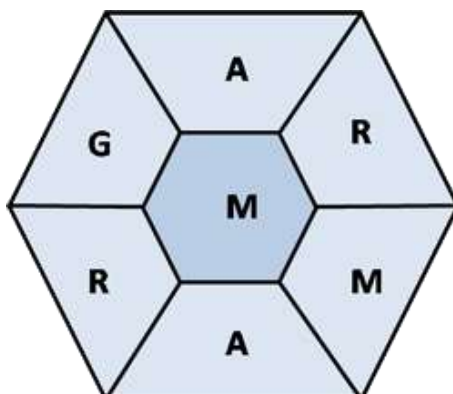
Across

1. an appropriate or favorable time or occasion
4. of or pertaining to a two-way system of electronic communications, as by means of television or computer:
5. the sum of the ideal qualifications of a knight, including courtesy, generosity, valor, and dexterity in arms.

Down

2. having or manifesting diplomacy or sensitivity
3. a strong inclination, taste, or liking for something

Q11. Make at least 4 four or more letter words from the grid according to the following rules:



- a. No plurals or proper nouns allowed.
- b. Each letter should be used only once.
- c. All words must be in ENGLISH.
- d. Each word must contain the letter at the centre of the grid.
- e. There should be AT LEAST ONE seven letter word.

Questions 12 and 13 are related. A detailed explanation of the answers will be provided after Question 13.

Consider this case:

Input : 4 1 3 7 5

STEP 1: 15 1 7 127 31

STEP 2: 6 1 7 10 4

STEP 3: 1 4 6 7 10

STEP 4: 7 5 13 17 14

STEP 5: 2 -8 -4 3 7

Step 5 is the output.

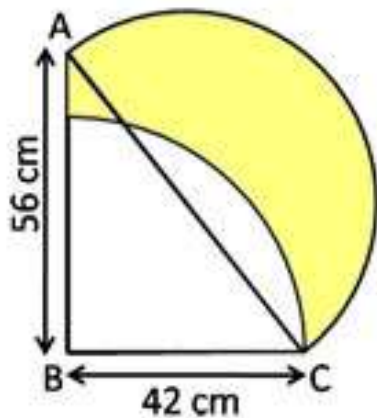
Q12. If the input is: 6 5 3 4 8,
What is the output?

Q13. If the input is: 2 4 6 8 10,
What is the output?

Q14. In a given test, Prachi scored more than Dino, Urmila scored as much as Diana, Raveena scored less than Anushka, Dino scored more than Urmila and Anushka scored less than Diana. Who scored the lowest?

Q15. If the difference between the Compound Interest and Simple Interest on a certain sum of money at the rate of 14% p.a. for 2 years is Rs. 117.6, Calculate the principal.

Q16.



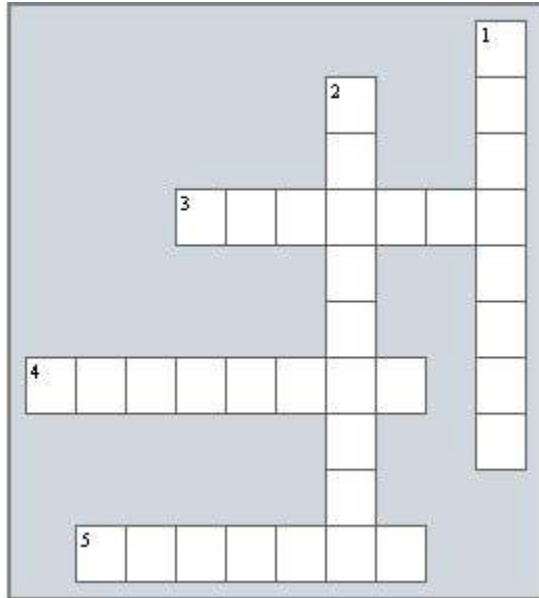
In the figure, ABC is a right angled triangle. A semicircle is constructed with AC as the diameter and a quarter circle is created with BC as the radius.

Using this, calculate the area of the yellow region. (Use $\pi = 22/7$)

Q17. As per an agreement a team of authors had to create 216 questions in a certain number of days. For the first 3 days, they stuck to the original plan and completed the daily assignment. After that, they created 8 questions over and above the plan everyday. One day before the day they had to submit the questions, they had 232 questions ready. How many questions a day did the team have to create as per the original plan?

Q18. Find the number of ways in which 5 persons P, Q, R, S and T stand in a queue with 6 other persons such that P stands before Q, Q stands before R, R stands before S and S stands before T. (Actual number required.)

Q19. Solve the crossword using the clues



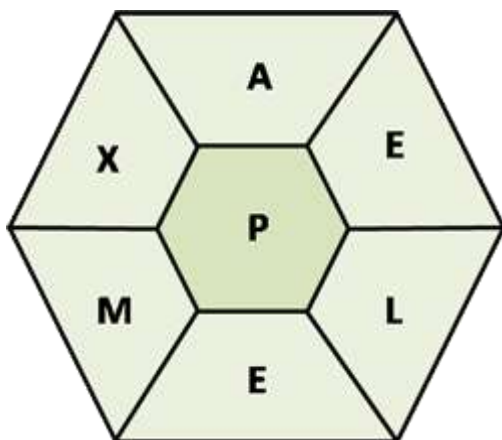
Across

3. position in life as determined by wealth
4. showing great joy, satisfaction, or triumph; rejoicing; exultant
5. to search thoroughly or vigorously through

Down

1. of, pertaining to, characteristic of, or suitable or intended for young persons
2. not false or copied; genuine; real

Q20. Make at least 8 four or more letter words from the grid according to the following rules:



- a. No plurals or proper nouns allowed.
- b. Each letter should be used only once.

- c. All words must be in ENGLISH.
- d. Each word must contain the letter at the centre of the grid.
- e. There should be AT LEAST ONE seven letter word.

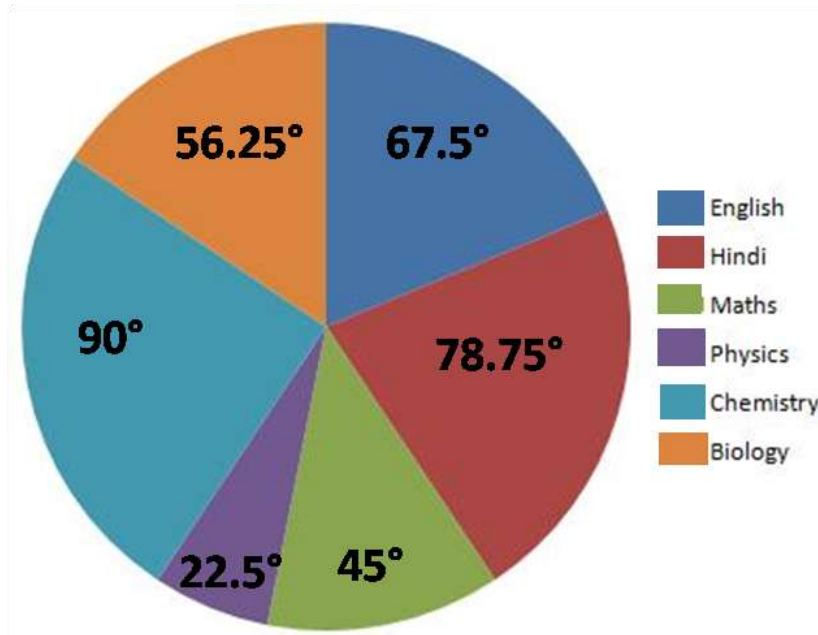
[View](#) the solutions of this quiz.

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Online Quiz #37 (29-May-09)

Directions for questions 1 & 3: All three questions are to be answered by referring to the same two diagrams.

The distribution of subject majors among 1920 Third Year students is represented in the pie chart. In the final exam, the percentage of students failing the final exam is depicted in the table.



Subject	Fail %
English	25
Hindi	20
Maths	15
Physics	10
Chemistry	30
Biology	12

Q1. Find the number of students who passed in Chemistry.

Q2. Find the ratio of number of students who failed in maths to the number of students who failed in physics. (Reduce to lowest possible terms.)

Q3. Find the pass percentage of the TY students. (Round off to the nearest integer.)

Q4. I am a 7- letter word.

Clue: The 5-6-7 of the model who walked down the 1-2-3-4 was 16 years.
What am I?

Q5. I am a 7- letter word.

Clue: They invited him to stay over as their 1-5-7-3-4 as he was too tired and need some 6-2-3-4.

What am I?

Directions for questions 6 & 7: In both questions: '!' = '+', '@' = '-', '#' = '*' and '\$' = '/'. Find the value of the following expressions:

Q6. $(5!26@78\#25\$5\#8!11\#4@1)\1000

Q7. $125\$25\#78!98@55\$11!87!1263@33$

Q8. The following words are anagrams for a single word each. Identify the actual words.

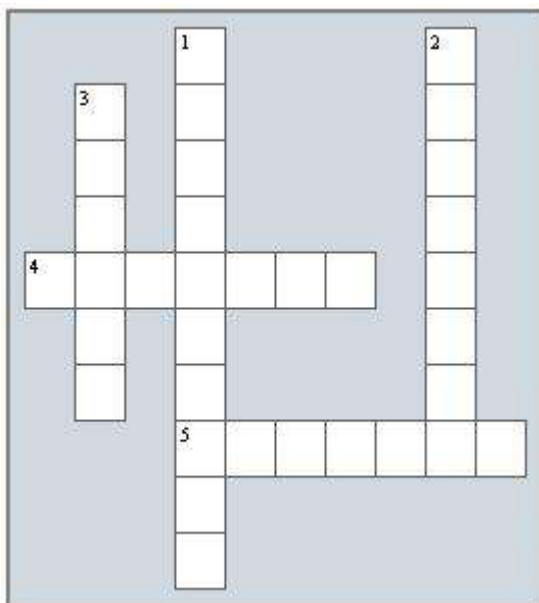
Qua Cue I Sos

Bud Incur

A Rains Ensconce

Mean Imp To

Q9. Solve the crossword using the clues



Across

4. emotionally out of control

5. not readily understood or clearly expressed

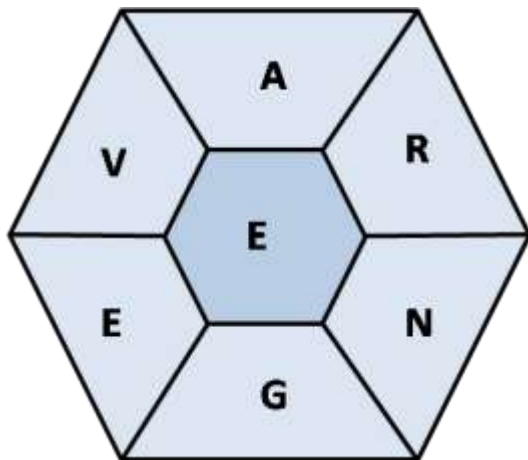
Down

1. the practical application of knowledge especially in a particular area : engineering

2. the quality or state of being grand

3. to come into existence as a legally enforceable claim

Q10. Make at least 5 six or more letter words from the grid according to the following rules:



- No plurals or proper nouns allowed.
- Each letter should be used only once.
- All words must be in ENGLISH.
- Each word must contain the letter at the centre of the grid.
- There should be AT LEAST ONE seven letter word.

Directions for Questions 11-12: Append a word to either the beginning or end of the words given and make a compound word.

Note: The same word must be appended to all the words. New compound words won't be entertained.

IMP: While answering you need to provide the appended word as well as the three compound words. Incomplete entries will NOT be considered. Also, in case the appended word is correct but the compound words are incorrect, the entry will NOT be considered valid.

For example:

Q. pole
fish
nip

Answer: cat
polecat
catfish
catnip

Q11. bee
dead
man

Q12. wash
news
pipe

Questions 13 and 14 are related. A detailed explanation of the answers will be provided after Question 14.

Consider this case:

Input : 13 11 18 12 19

STEP 1: 25 21 37 23 37

STEP 2: 626 442 1226 530 1370

STEP 3: 313 221 613 265 685

STEP 4: 61 32 91 76 118

STEP 5: 16 23 19 67 811

Step 5 is the output.

Q13. Calculate the output if :
the input is: 14 9 8 10 15

Q14. Calculate the input if the output of the third step is : 481 221 313 925 761

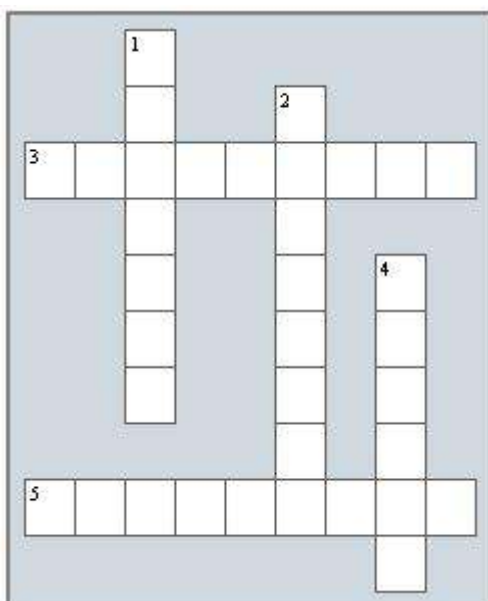
Q15. Two faces of a die are pink, three are black and the remaining one is green. The die is tossed 3 times. Find the probability that the colour pink appeared on the first toss, black on the second and green on the third.

Q16. 5 boys and 5 girls have to be arranged in 10 linearly arranged seats. Find the probability that the boys and girls sit in alternate seats.

Q17. Find the sum of all all four digit numbers that give a remainder of 4 when divided by 6.

Q18. The average weight of 40 students in the class is 73kg. Of these, the average weight of 10 particular students is 90. What is the average weight of the remaining students? (Round off to the nearest integer.)

Q19. Solve the crossword using the clues



Across

3. willful or malicious destruction or defacement of public or private property

5. an interpretation, as of a role or a piece of music

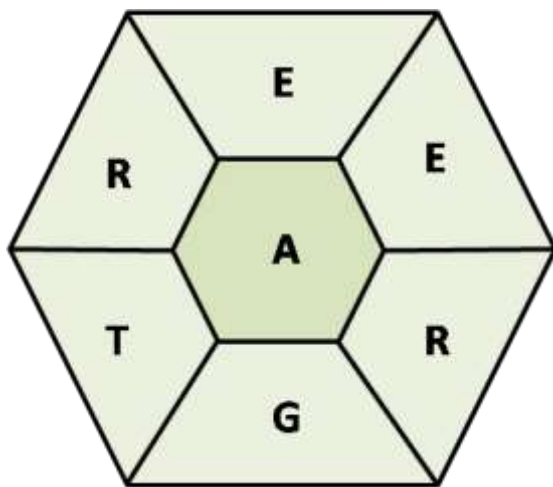
Down

1. to pretend ignorance of or fail to take action against something one ought to oppose

2. marked by forceful and fluent expression

4. a trusted counselor or guide

Q20. Make at least 5 six or more letter words from the grid according to the following rules:



- No plurals or proper nouns allowed.
- Each letter should be used only once.
- All words must be in ENGLISH.
- Each word must contain the letter at the centre of the grid.
- There should be AT LEAST ONE seven letter word.

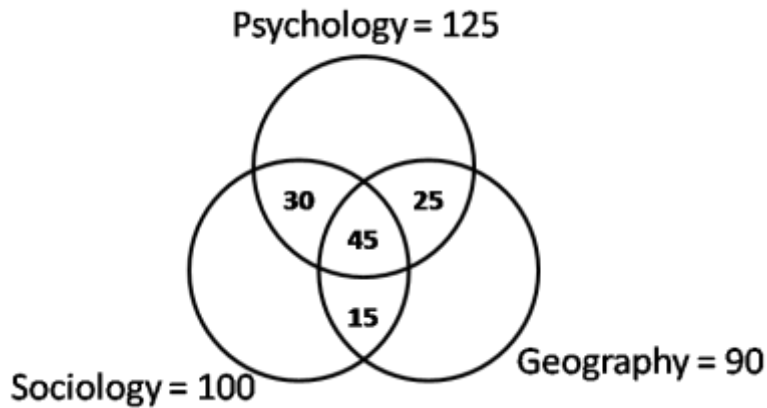
[View](#) the solutions of this quiz.

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Online Quiz #39 (05-Jun-09)

Directions for questions 1 to 3:

Answer the questions based on the following Venn diagram. Detailed Solutions will be provided at the end of the third question.



The numbers in the diagram indicate the number of students that have passed in the subjects. Every student in the class has attempted all three papers. The total class strength is 250.

Q1. What percentage of students have failed all 3 subjects?

Q2. What percentage of students have passed in two or more subjects?

Q3. What percentage of students have failed in at least 1 subject?

Directions for Questions 4-5: Append a word to either the beginning or end of the words given and make a compound word.

Note: The same word must be appended to all the words. New compound words won't be entertained.

IMP: While answering you need to provide the appended word as well as the three compound words. Incomplete entries will NOT be considered. Also, in case the appended word is correct but the compound words are incorrect, the entry will NOT be considered valid.

For example:

Q. pole
fish
nip

Answer: cat
polecat
catfish
catnip

Q4. chair
fire
pit

Q5. tooth
skin
roe

Directions for Questions 6-7: A letter has been changed in each word of the following quotes. Identify the actual quotes.

For example:

Q. Woven mho strike do he equat do den tack ambitios.
That it ince tell dine it tone moreover.

Answer: Women who strive to be equal to men lack ambition.
What is once well done is done forever.

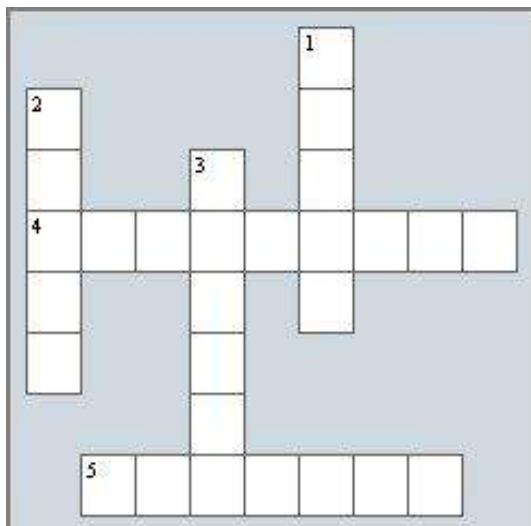
Q6. Dove fights morn tires then hale extinguished.
Me than lived foreven, lever tears lying.

Q7. Flood it anherited; chadacter it darned.
B persin's craracter leaches down beform she lerson moes.

Q8. I am an 8-letter word.
Clue: Ever 6-7-5-8-4 he struck the nail with a hammer with great 1-2-3-8-4, it shape has never been the same.
What am I?

Q9. I am an 8-letter word
Clue: The miserly shopkeeper 2-3-5-1-4 sold his wares at a cheap 4-6-7-8.
What am I?

Q10. Solve the crossword using the clues



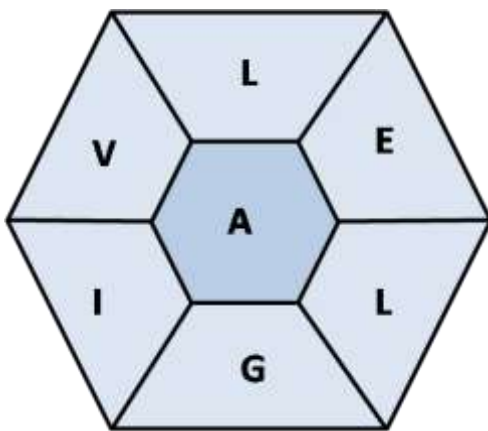
Across

4. to confer with another so as to arrive at the settlement of some matter
5. the amount that remains when use or need is satisfied

Down

1. having full use of one's faculties
2. to put to death by mob action without legal sanction
3. A term commonly used to describe a particular sort of delivery in Cricket. The Pakistani fast bowlers Wasim Akram and Waqar Younis were well known for their use of these deliveries.

Q11. Make at least 5 five or more letter words from the grid according to the following rules:



- a. No plurals or proper nouns allowed.
- b. Each letter should be used only once.
- c. All words must be in ENGLISH.
- d. Each word must contain the letter at the centre of the grid.
- e. There should be AT LEAST ONE seven letter word.

Questions 12 and 13 are related. A detailed explanation of the answers will be provided after Question 13.

Consider this case:

Input : 13 15 12 11 9

STEP 1: 20 23 21 21 20

STEP 2: 10 14 13 14 14

STEP 3: 21 31 41 41 01

STEP 4: 01 21 31 41 41

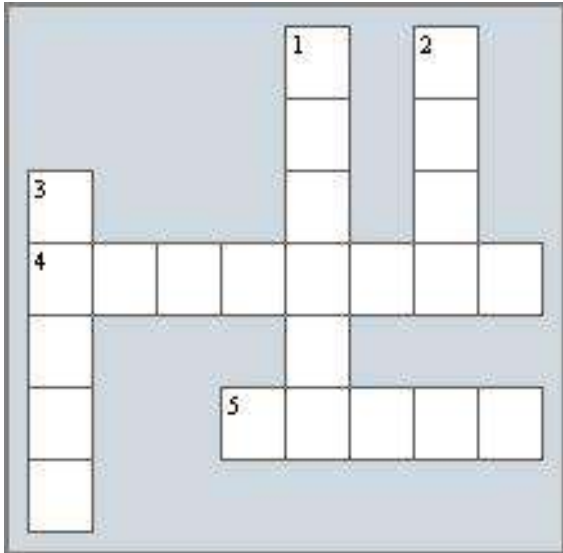
STEP 5: 10 30 40 50 50

Step 5 is the output.

Q12. Calculate the output if the input is: 8 12 16 7 10

Q13. Calculate the input if the output of the third step is : 21 51 22 71 30

Q14. Solve the crossword using the clues



Across

4. to rise or float in or as if in the air
5. an appointed meeting or meeting place

Down

1. a chain or shackle for the feet
2. a keen sense of what to do or say in order to maintain good relations with others
3. a substance composed of two or more metals

Q15. 3 kg of sugar at Rs. 15 per Kg. is mixed with 13 Kg. of sugar at Rs. 12 per kg. Find the average price of the mixture. (Approximate to 2 digits after the decimal point.)

Q16. How many multiples of 7 lie between 1300 and 1500?

Q17. One evening, while Dilshad was on her way home, she completed one-third of her journey by train at 25 km/hr. Then another one third of her journey on her bicycle at 15 km/hr and finally, she walked the remaining distance home at 10 km/hr. Find her average speed during the journey. (Approximate to 2 digits after the decimal point.)

Q18. A sold a television set to B at a profit of 25%. Later on, B sold it back to A at a profit of 30%. In the process, B gained Rs. 2482.5. Find the original price of the set.

Directions for questions 19 & 20: In both questions: 'q' = '+', 'w' = '-', 'e' = '*' and 'r' = '/'. Find the value of the following expressions:

Q19. $[(66q38)r(128r16)]w[(565r113)e(119w116)]$

Q20. $[(119/17)*(75/5)]+[(144/16)-(52/26)]$

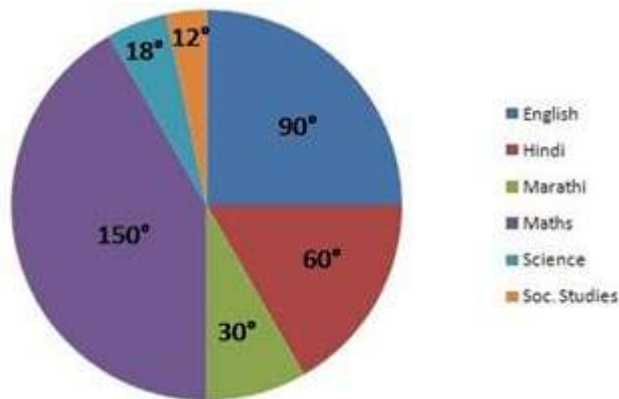
[View](#) the solutions of this quiz.

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Online Quiz #41 (26-Jun-09)

Directions for questions 1 & 3: All three questions are to be answered by referring to the same two diagrams.

600 school students were asked to pick their favorite subjects. The subjects they chose are represented in the pie chart. Following that each student was asked to attempt a test in the subject he/she picked. In that test, the percentage of students passed is depicted in the table.



Subject	Pass %
English	80
Hindi	92
Marathi	70
Maths	44
Science	40
Soc. Studies	65

Q1. Find the number of students who failed in Science.

Q2. Find the ratio of the number of students who passed in maths to the number of students who passed in English. (Reduce to lowest possible terms.)

Q3. Find the pass percentage of all the students. (Round off to the nearest integer.)

Q4. I am a 7-letter word

Clue: The mischievous, little 1-2-3 always 4-5-6-7 when asked to speak the truth.
What am I?

Q5. I am a 6-letter word

Clue: We 3-5-6 all pawns in the 4-3-1-2 of life
What am I?

Directions for Questions 6-7: Append a word to either the beginning or end of the words given and make a compound word.

Note: The same word must be appended to all the words. New compound words won't be entertained.

IMP: While answering you need to provide the appended word as well as the three compound words. Incomplete entries will NOT be considered. Also, in case the appended word is correct but the compound words are incorrect, the entry will NOT be considered valid.

For example:

Q. chair
fire
pit

Answer: arm.
armchair
firearm
armpit

Q6. track
log
horse

Q7. cook
crowd
lay

Directions for Questions 8-9: A letter has been changed in each word of the following quotes. Identify the actual quotes.

For example:

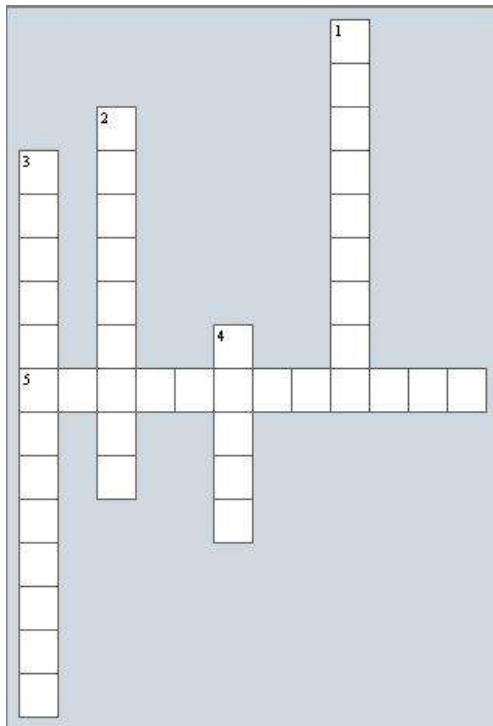
Q. Dove fights morn tires then hale extinguished.
Me than lived foreven, lever tears lying.

Answer: Love lights more fires than hate extinguishes.
He that lives forever, never fears dying.

Q8. It tou art boing do to somethink tolight chat wou'll me lorry far it thy mouning,
bleep rate.
Teach nor she scars, evel it yol hate do staed in n lactus.

Q9. Lever sat to sue do prime, on les sue do leakness.
Dhristmas it a lime then averyone wanes hit pass formotten ind she plesent
rememberes!

Q10. Solve the crossword using the clues



Across

5. the act of liberating someone or something

Down

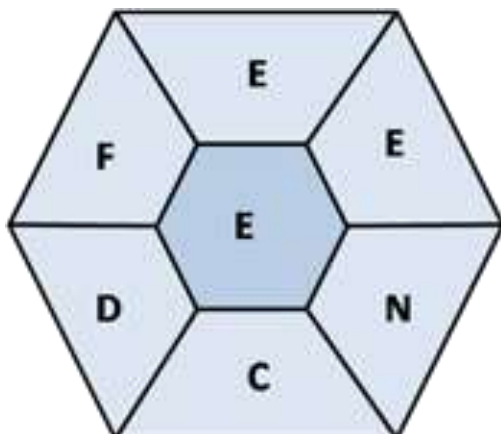
1. being in ascendancy : dominant

2. to bring under control and governance as a subject : conquer

3. not definitely or precisely determined or fixed : vague b: not known in advance c: not leading to a definite end or result

4. One who attempts to equal or surpass another, or who pursues the same object as another; a competitor.

Q11. Make at least 6 four or more letter words from the grid according to the following rules:



- a. No plurals or proper nouns allowed.
- b. Each letter should be used only once.
- c. All words must be in ENGLISH.
- d. Each word must contain the letter at the centre of the grid.
- e. There should be AT LEAST ONE seven letter word.

Q12. The following words are anagrams for a single word each. Identify the actual words.

Bird Tuitions

Erst My My

Pelted Venom

Lemon Rent

Questions 13 and 14 are related. A detailed explanation of the answers will be provided after Question 14.

Consider this case:

Input 89 77 53 21 15

step I: 98 77 35 12 51

step II: 91 70 28 5 44

step III: 100 49 100 25 64

step IV: 51 -51 75 -39 -36

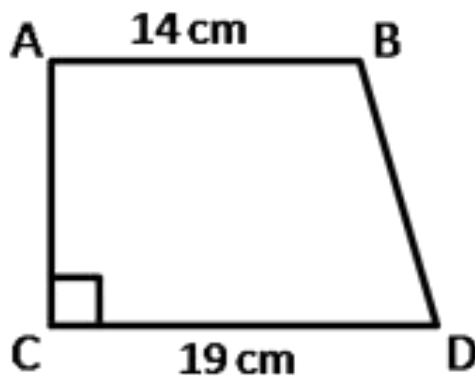
step V: 51 75 39 36 51

Step 5 is the output.

Q13. Calculate the output if the input is: 41 36 22 19 35

Q14. Calculate the output if the input is : 39 23 18 92 76

Q15. The area of the following figure is 198 sq.cm. Find the length of BC.



Q16. The average age of three girls is 15 years. Find the age of the oldest, if their ages are in the ratio 8 : 5 : 2.

Q17. Once a father said to his son, "I am 9 times your age when I was as old as you are right now." Find their ages if the sum of their ages is 70.

Q18. If the letters of the word MISSISSIPPI are rearranged, find the probability that the 'I's are always together. (Only a ratio in the lowest possible terms will be accepted as the answer to avoid any ambiguity.)

Directions for questions 19 & 20: In both questions: 'a' = '+', 'b' = '-', 'c' = '*' and 'd' = '/'. Find the value of the following expressions:

Q19: $(45d5b6c56b9)d112c1d3a2$

Q20. $(20a720d12a252a78c8b51b5)d9$

[View](#) the solutions of this quiz.

[Discuss](#) the quiz with TestFunda users

ANSWERS

Solutions of Online Quiz # 23

Answer 1: Time.

Onetime

Meantime

Timeshare

Answer 2: Boat.

Steamboat

Houseboat

Fireboat

Answer 3: Care.

Careworn

Caretaker

Carefree

Answer 4: ensure

mannerism

misinform

Answer 5: Aniseikonia

arcadia

emote

Answer 6: Egence

ceramic

entice

Answer 7: A loan though old is not a gift.

A lock is better than suspicion.

Answer 8: A penny saved is a penny gained.

Better no doctor at all than three.

Answer 9: A son is a son till he gets him a wife,

A spoon does not know the taste of soup, nor a learned fool the taste of wisdom.

Answer 10: LAVSERY and LAVFOUR.

The first letter is shifted to the fourth position while the second, third and fourth letters occupy positions 1, 2 and 3.

Answer 11: EPCRG and HYNQG.

The letters at the odd positions are replaced by letters that appear two positions after them in the English Alphabet.

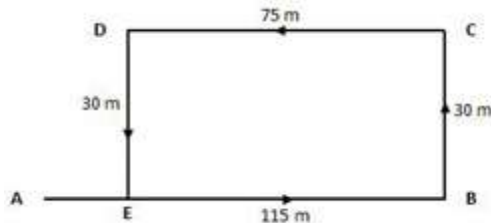
The letters at the even positions are replaced by letters that appear two positions before them in the English Alphabet.

Answer 12: 10

The expression translates to $13 + 16 \times 12 / 24 - 11$ which is equal to 10.

Answer 13: Gladys is the aunt of Paris or Paris is the niece of Gladys.

Answer 14: 40 metres.



The Figure represents: Geet's path viz. A-B-C-D-E.

We need to find EA, which is $115 - 75 = 40$ metres.

Answer 15: 6, 18, 22, 66, 71, 213, 219, 657, 664

$$6 \times 3 = 18, 18 + 4 = 22$$

$$22 \times 3 = 66, 66 + 5 = 71$$

$$71 \times 3 = 213, 213 + 6 = 219$$

$$219 \times 3 = 657, 657 + 7 = 664$$

95, 45, 20, 0 (every number is equal to the product of the digits of the number preceding it)

$$9 \times 5 = 45, 4 \times 5 = 20, 2 \times 0 = 0$$

Answer 16: Z

After removing the vowels and reversing the second half, we get :

B 4 ! L 8 % F 9 & 2 3 # Y Z \$ 7 X 5 T ^ R M P

The 9th element from the left is: &

and, the 5th element to its right is Z.

Answer 17: 280.

let the first term be a and the common difference be d.

$$\text{So, } a + 66d = 436$$

$$\text{and, } a + 6d = 76.$$

$$\text{hence, } d = 6 \text{ and } a = 40$$

$$\text{So, 41st term} = a + 40d = 40 + 240 = 280$$

Answer 18: Impetus

1-2-3 : Imp

7-6-1-5-4: Suite

7-6-1-5: Suit

Answer 19: Benign

1-2-4-3-5: Being

1-2-5-4-6: Begin

Answer 20: 4/7

The probability that both selected candidates are women = $\frac{5C2}{15C2} = \frac{10}{105}$.

Also, the probability that one man and one woman are selected = $(10C1 \times 5C1)/105 = 50/105$.

Hence, the probability that at least one of the selected candidates is a woman = $(10 + 50)/105 = 60/105 = 4/7$

Answer 21: 27 students.

Let P, C and M denote Physics, Chemistry and Maths.

The % of students who passed in P and C only = % of students who passed in both P and C - % of students who passed in all three subjects = $20 - 15 = 5\%$

The % of students who passed in P and M only = % of students who passed in both P and M - % of students who passed in all three subjects = $17 - 15 = 2\%$

The % of students who passed in M and C only = % of students who passed in both M and C - % of students who passed in all three subjects = $18 - 15 = 3\%$

So, % of students who passed in Maths only = % of students who passed in M - % of students who passed in P and M only - The % of students who passed in M

and C only - The % of students who passed in all three subjects = $29 - 2 - 3 - 15 = 9\%$

Therefore, the number of students who passed in Maths only = 9% of 300 = 27

Solutions of Online Quiz #25

Answer 1: palp
hellish
dyad

Answer 2: drained
devoid
cynic

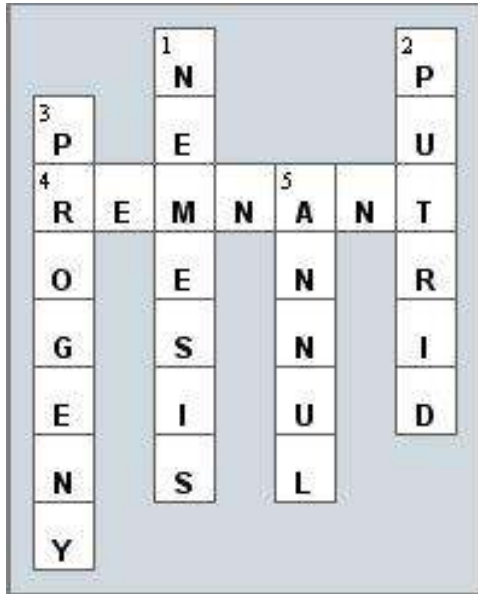
Answer 3: Rail.
Bedrail
Railway
Railroad
Or
Side.
Bedside
Sideway
Roadside

Answer 4: Blood is thicker than water.
Both your friend and your enemy think you will never die.

Answer 5: Death always comes too early or too late
Do not look where you fell, but where you slipped.

Answer 6: RIDER: 45894
DINNER: 853394
by comparing the two words, we get the values of the letters as:
C: 6
R: 4
A: 1
T: 7
E: 9
R: 4
I: 5
D: 8
N: 3
Using these, we can deduce the codes for the above words.

Answer 7:



Answer 8:

- a. Warmth, Weary, Wrangle, wrath, Wreath, Wretch.
- b. Dawn, Deam, Drape, Drawer, Drawn, Dream.

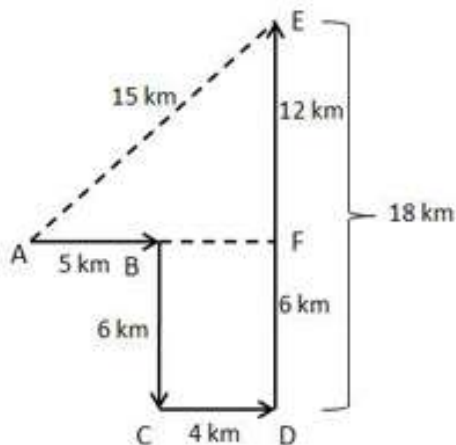
Answer 9: 61

The equation translates to: $19 + 45 - 5 \times 15 / 25$.

$19 + 45 - 5 \times 15 / 25 = 64 - 75 / 35 = 64 - 3 = 61$.

Answer 10: 144. The number in the innermost circle is equal to the square of the difference between the outer numbers.

Answer 11: Her friend's house is 15 km away from hers.



In the figure, A-B-C-D-E represents the path she took. Extend AB to F. We can, thus, calculate AE using the Pythagoras' theorem.

Answer 12: N

After reversing the first half, we get :

I R 4 2 F # E > \$ N L D B 1 % < H & P R @ *

The 7th element from the left is: E
and, the 3rd element to its right is N.

Answer 13: Derision

3-4-5-2: Rise

8-7-6-5-2: Noise

5-8-6-1-2: Snide

Answer 14: Venerate

5-6-7-8: Rate

3-2-6-7: Neat

4-1-2-3: Even

Answer 15: ALGEBRA : BKHDCQB

GEOMETRY: HDPLFSSX

The letters at the odd positions are replaced by the letters succeeding them while the letters at the even positions are replaced by the letters preceding them.

Answer 16: 9856 sq.cm

volume of the hemisphere = $(1/2) * (4/3) * \pi * r^3 = (1/2) * (4/3) * (22/7) * 14 * 14 * 14 = 5749.33 \text{ sq.cm}$

height of cone = height of toy - radius of hemisphere = $34 - 14 = 20 \text{ cm}$

volume of the cone = $(1/3) * \pi * r^2 * h = (1/3) * (22/7) * 14 * 14 * 20 = 4106.66 \text{ sq.cm}$

Hence, Volume of the toy = $5749.33 + 4106.66 = 9856 \text{ sq.cm}$

Using pi as 3.14, you get 9852 sq.cm

Answer 17: 1/15.

The six letters in the word MUMBAI can be arranged among themselves in $6!/2!$ Ways (as M is repeated twice).

So, $n(S) = 360$

Let E be the event that the arrangement has the letters "MUM" in sequence.

To find the number of words containing "MUM" in sequence, we consider "MUM" as one entity and arrange "MUM", B, A and I among themselves. This can be done in $4!$ Ways.

So, $n(E) = 4! = 24$

Hence, $P(E) = 24/360 = 1/15$

Answer 18: Rs. 1292

The total money reduced = $28 + 42 + 20 = 90$

Therefore the total money left = $5840 - 90 = 5750$

After the reduction, Gita's share = $5750 * 5/23 = 1250$

Hence, Gita's share, before the reduction = $1250 + 42 = \text{Rs. } 1292$

Answer 19: They are sisters.

Answer 20: The equation translates to $13 + 22 \times 55 / 44 - 33$ which is equal to 7.5

Answer 21:

a. pool

b. son

Solutions of Online Quiz #27

Answer 1: top.

blacktop
topnotch
topcoat

Answer 2: Wheel.

Flywheel
Wheelbarrow
Pinwheel

Answer 3: northern

sniggles
runner

Answer 4: sausages

golliwog
razor

Answer 5:

a. 3125 and 46656 : The series progresses as 1^1 , 2^2 , 3^3 , 4^4 and so on. Hence the next two numbers would be 5^5 and 6^6 which are 3125 and 46656 respectively.

b. 98 and 130: The series progresses as $2 + 8$, $10 + 8$, $18 + 16$, $34 + 16$, $50 + 24$, $74 + 24$ and $98 + 32$.

Answer 6: A wise man hears one word and understands two.

Better to light a candle than to curse the darkness.

Answer 7: Everyone loves justice in the affairs of another.

Flattery makes friends and truth makes enemies.

Answer 8: Aman is Edward's Grandfather.

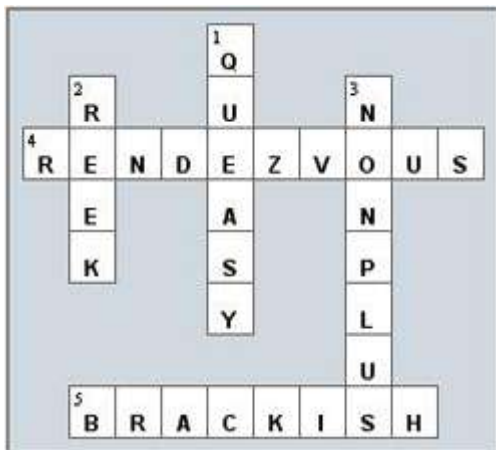
Answer 9:

a. Crack, Crane, Crank, Crate, Creek
b. Dander, Danger, Dangle, Dengue, Dented

Answer 10: 5184.

$4 \times 6 = 24$
 $24 \times 6 = 144$
 $144 \times 6 = 864$
 $864 \times 6 = 5184$

Answer 11:



Q12. 4 5 6 7 6 5 8 9 4 2 4 6 7 5 3 3 5 6 7 6 7 5 4 3 2 4 6 8 2 6 7 8

In the given series how many 6's are succeeded by 7 but not preceded by 5?

Answer 12: 3 times.

Answer 13:

BEANS = 23985

BRAND = 24981

MASTER = 795634

From the above codes, we get

A = 9

B = 2

D = 1

E = 3

R = 4

S = 5

T = 6

M = 7

N = 8

Using this, we can find the codes for any words containing these any of letters.

Answer 14: Santa Claus.

The message translates to : 3(Water - 2) = 3 (H₂O - 2) = 3 (HO) = HO HO HO, which is Santa's favourite catchphrase. :)

Answer 15: 166

The statement translates to:

$63 / 7 + 15 * 12 - 46 / 2$ which is equal to: 166.

Answer 16: 20/99

Since the two events are independent, the probability that Siddharth and Rashmi both win the prize

= (Probability that Siddharth wins it) × (Probability that Rashmi wins it)

= $4/9 \times 5/11 = 20/99$

Answer 17: 9 : 10

Let Bharat's and Chitra's salaries be b and c respectively.

$$b \times 1.25 \times 0.8 = c \times 1.2 \times 0.75$$

$$b/c = 0.9/1 = 9/10$$

Ratio of Bharat's salary to Chitra's salary = 9/10

Answer 18: 15 degrees

As triangle PQT is an equilateral triangle and triangle PQRS is a square, $TQ = QR$

Therefore, triangle TQR is an isosceles triangle.

Angle TQP = 60 degrees and Angle RQP = 90 degrees

Therefore, angle TQR = 150 degrees

Therefore, angle QRT + angle QTR = $(180 - 150)/2 = 15$ degrees.

Answer 19: 20 hours

Let x and y be the speeds of airplanes X and Y.

therefore, $y = x + 10$

By the time airplane Y leaves Indore, airplane X has covered $8x$ km.

As both the airplanes reach Mumbai at the same time, Y covers 600 km in the same time that X covers $(300 - 8x)$ km.

$$\text{So, } 300/y = (300 - 8x)/x$$

$$\text{Therefore, } 300/(x + 10) = (300 - 8x)/x$$

$$\text{Therefore, } 300x = 300x - 8x^2 + 3000 - 80x$$

$$\text{So, } 8x^2 + 80x - 3000 = 0$$

$$\text{Hence, } x^2 + 10x - 375 = 0$$

$$\text{So, } (x + 25)(x - 15) = 0$$

Hence, $x = 15$ as speeds can't be negative.

Therefore, time taken by airplane X = $300/15 = 20$ hrs

Answer 20: Horse and Hunger/weakness

Kid is the young one of a Goat while colt is the young one of a horse.

Running causes tiredness while a fast causes hunger/weakness.

Solutions of Online Quiz #29

Answer 1: Thumb.

thumbnail

thumbscrew

thumbprint

Answer 2: Dog.

underdog

doggone

dogfight

Answer 3: developed

evidence

hush

Answer 4: gagging

momentum

depend

Answer 5: A hedge between keeps friendship green.

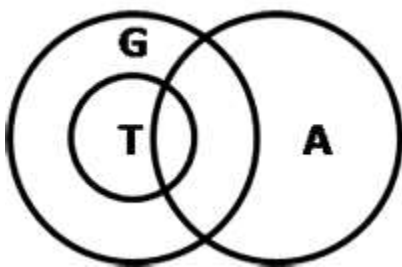
A throne is only a bench covered with velvet.

Answer 6: Evil is sooner believed than good.

A hen is heavy when carried far.

Answer 7:

Case A:



From the VENN Diagram, it follows that conclusions 2 & 3 hold good while the others do not.

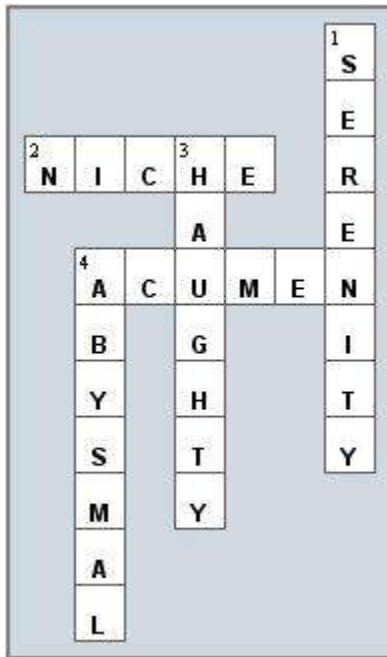
Answer 8: Karen will be the second tallest while Shirley will be the second shortest.

From the given information, we get the order of their heights as:

Mona > Karen > Andrea > Shirley > Rose.

Answer 9: The train that is moving against the direction of the Earth's spin i.e. westward is more likely to wear out its tyres as less centrifugal force acts on it.

Answer 10:



Answer 11: ALERT = 94237, TOAST = 71967 & MOIST = 81567

From the data that we're given, we get:

$$N = 0$$

$$O = 1$$

$$E = 2$$

$$R = 3$$

$$L = 4$$

$$I = 5$$

$$S = 6$$

$$T = 7$$

$$M = 8$$

$$A = 9$$

Using this we can easily find the above information.

Answer 12: 35 & -9.

The equations translate to: $144 - 23 \times 5 + 24 / 4$ & $44 / 22 \times 5 + 55 / 11 - 24$

On solving further, they reduce to 35 & -9 respectively.

Answer 13:



Answer 14: $5! * 5!$

There are 5 vowels and 4 consonants in EDUCATION.

If the Vowels have to be kept together, they have to be considered as a single entity together.

Hence, the 4 consonants and the group of vowels form 5 entities that can be arranged in $5!$ ways. Also, the vowels can be rearranged among themselves in $5!$ ways.

Hence, the answer is $5! * 5!$

Answer 15: Rs. 33.33

For the first item,

$$CP + P = SP$$

$$SP = 400$$

$$P = 0.2 CP$$

$$\text{so, } 1.2 * CP = 400$$

$$\text{Hence, CP of the first item} = 400/1.2 = 333.33$$

For the second item,

$$CP - L = SP$$

$$SP = 400$$

$$L = 0.2 CP$$

$$\text{so, } 0.8 * CP = 400$$

$$\text{Hence, CP of the second item} = 400/0.8 = 500$$

$$\text{Hence, CP of the two items} = 333.33 + 500 = \text{Rs. } 833.33$$

He sold the two items for Rs. 800 ($= 400 * 2$)

Hence, he lost Rs. 33.33 in the transaction.

Answer 16: 864

Let x, y & z be the digits at the hundred's, ten's and digit's place of the original number.

Hence, the original number is $100x + 10y + z$.

Its reverse is $100z + 10y + x$.

Subtracting the reverse from the original number, we get

$(100x + 10y + z) - (100z + 10y + x) = 99x - 99z$ which is equal to 396

Hence, $x - z = 4$

Here, we start substituting possible values.

If $x = 9, z = 5$

If $x = 8, z = 4$

If $x = 7, z = 3$

If $x = 6, z = 2$

If $x = 5, z = 1$

If $x = 4, z = 0$

Also, $x + y + z = 18$.

If $x = 4, 5$ or 6 , we get y as a 2 digit number which is not possible.

Hence, $x = 9, 8$ or 7 .

If $x = 9$ & $z = 5$, then $y = 4$

If $x = 8$ & $z = 4$, then $y = 6$

If $x = 7$ & $z = 3$, then $y = 8$

Also, $x^2 + y^2 + z^2 = 116$

The only combination that satisfies this equation is $x = 8, y = 6$ and $z = 4$

Hence, the number is 864.

Answer 17: Radius of the circle = $\frac{1}{2}$ * diagonal of the rectangle.

Let the diagonal of the rectangle be 'x' cm.

$$x^2 = 12^2 + 5^2.$$

$$x^2 = 169$$

$$x = 13$$

So, radius of the circle = 6.5 cm

Area of the circle = $\left(\frac{22}{7}\right) * 6.5 * 6.5 = 132.79$ sq.cm.

Area of the rectangle = $12 * 5 = 60$ sq.cm.

Area of the green region = $132.79 - 60 = 72.79$ sq.cm.

Answer 18: The words that can be formed are:

1. STARVED
2. STAVED
3. STARED
4. STARVE
5. STAVE
6. STARE
7. SAVED
8. STEAD
9. SAVER
10. RAVES (when used as a verb)
11. RATES (when used as a verb)
12. DARES (when used as a verb)

Answers 19:

- a. Quintessence
- b. Presentiment
- c. Salubrious
- d. Abeyance

Answer 20: Gangue & Linen

- a. Waste from homes is garbage while waste materials in ore are called gangue.
- b. Latex is the raw material to make rubber while flax is the raw material to make Linen.

Answer 21: $1/8$.

Let 'a' be the length of a side of the square.

Hence, area of the square = a^2

For triangle QXY, base Qx = height YQ = $1/2 * a$

Hence, area of the triangle = $1/2 * (1/2 * a) * (1/2 * a) = 1/8 * a^2$

The probability that the point selected lies in triangle QXY is

= (area of triangle QXY)/(area of square PQRS)

= $1/8$

Solutions of Online Quiz #31

Answer 1: emergence
sedulous
seditious

Answer 2: everyone
sundries
reaper

Answer 3: Bill.
billboard
billfold
duckbill

Answer 4: Gun.
gunboat
guncotton
gunlock

Answer 5: A house without a dog or a cat is the house of a scoundrel.
A lie travels round the world while truth is putting her boots on.

Answer 6: A soft answer turneth away wrath: but grievous words stir up anger.
A tree falls the way it leans.

Answer 7: There can't be any mud in the pit or it wouldn't have been a pit to begin with.

Answer 8: 44.
This expression translates to $43 + (112 + 53) / (18 - 3) \times (42 / 14) - 32$ which is equal to $43 + 165 / 15 \times 3 - 32$ which is equal to 44.

Answer 9: 32 0 -32 96 144

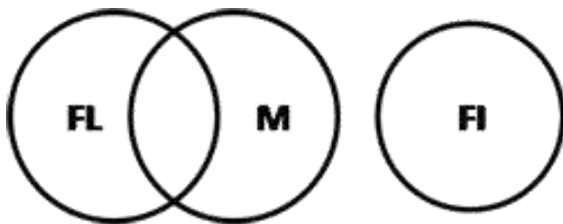
Answer 10: 32 80 -52 48 84.

Answer 11:



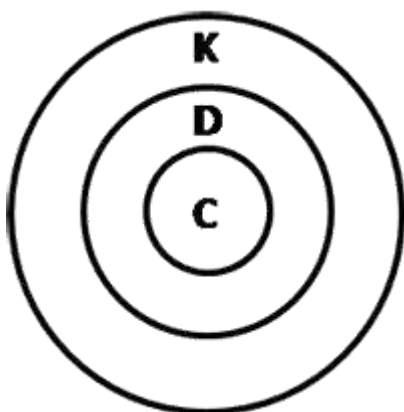
Answer 12:

Case A:



From figure 1, we get that conclusions a & c follow.

Case B:

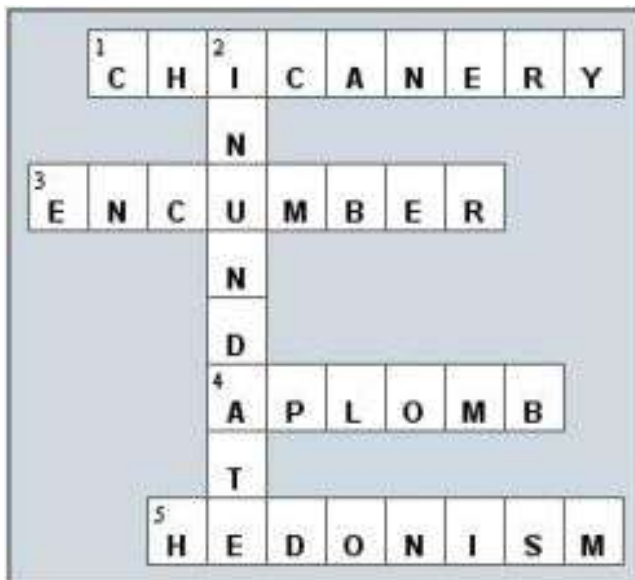


From figure 2, we get that all the conclusions follow.

Answer 13: The words that can be formed are:

trained
detrain
antired
trined
tirade
tinder
rident
retina
retain
ratine
ranted
rained
ardent
airted

Answer 14:



Answer 15: Blue - Orange - Green - Yellow - Indigo - Violet - Red.

Answer 16: 3.44 square units.

There are four quarters in the square equal the area of one complete circle.

The shaded region is, thus, the area of the square - the area of one circle.

The area of the square = $4 * 4 = 16$ sq. units

The area of the circle = $3.14 * 2 * 2 = 12.56$ sq. units

Thus, the area of the shaded region = $16 - 12.56 = 3.44$ sq. units.

Answer 17: 164

The numbers could be four digit, three digit, two digit or one digit numbers.

For four digit numbers, the first digit can't be zero, so the first digit can have four possibilities, the second can have four possibilities, the third can have 3 possibilities and the fourth can have 2 possibilities. Hence, there are $4*4*3*2 = 96$ possible numbers.

For three digit numbers, the first digit can't be zero, so the first digit can have four possibilities, the second can have four possibilities and the third can have 3 possibilities. Hence, there are $4 \times 4 \times 3 = 48$ possible numbers.

For two digit numbers, the first digit can't be zero, so the first digit can have four possibilities and the second can have four possibilities. Hence, there are $4 \times 4 = 16$ possible numbers.

zero isn't a natural number. Hence, there can be only 4 single digit numbers.

Hence, total number of possible numbers = $96 + 48 + 16 + 4 = 164$.

Answer 18: $2/3$ or $4/6$.

There are 6 possible cases when the sum of the dice is less than or equal to four.

Dice 1 - 1 , Dice 2 - 1

Dice 1 - 1 , Dice 2 - 2

Dice 1 - 1 , Dice 2 - 3

Dice 1 - 2 , Dice 2 - 1

Dice 1 - 2 , Dice 2 - 2

Dice 1 - 3 , Dice 2 - 1

So, $n(S) = 6$

There are only 4 events among these when only one die has 1 facing upwards.

So, $n(E) = 4$

Hence, $P(E) = 4/6 = 2/3$

Answer 19: 80 days.

The number of man-hours required to complete the task is $35 \times 8 \times 76 = 21280$.

The number of days required to complete the task by 19 men working 14 hours a day = $21280 / (19 \times 14) = 80$.

Answer 20: The words that can be formed are:

revenge

veneer

renege

evener

verge

venge

reeve

never

nerve

green

genre

Solutions of Online Quiz #33

Answer 1: Pyramid

3-4-5 = ram

5-4-6-7- = maid

1-4-7-7-2 = paddy

Answer 2: Snooze

2-3-1-6 = nose

3-4-5-6-1 = oozes

Answer 3: One after another.

Answer 4: cat

polecat

catfish

catnip

Answer 5: writer

copywriter

ghostwriter

typewriter

Answer 6: It is easy to open a store -- the hard part is keeping it open!

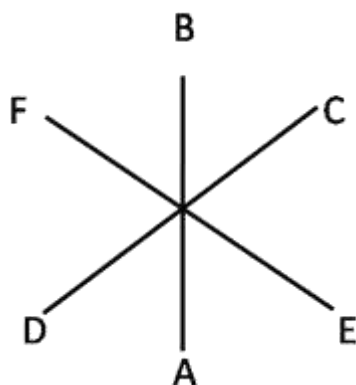
See people beyond who they are, not just who they seem to be.

Answer 7: Women who strive to be equal to men lack ambition.

What is once well done is done forever.

Answer 8: Dhaval.

Using the information, we get an arrangement as shown in the figure:



Answer 9: 17 13 -2 21 -7.

Answer 10: 64 169 121 81 49

Sequence of steps:

Step 1: 2 * square root of input

step 2: step 1 / 2 + 1

Step 3: All elements are shifted left by one position

Step 4: Step 2 - step 3

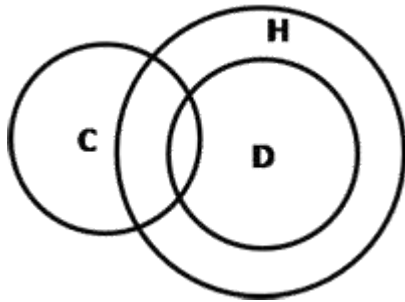
Step 5: Step 2 + step 4

Answer 11: 212.

The equation translates to: $17 \times 5 + 18 \times 7 - 119/17 + 152/19$ which is equal to 212

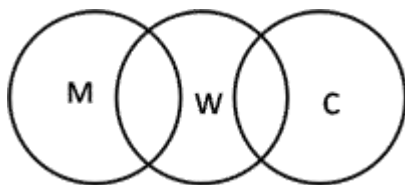
Answer 12:

Case A:



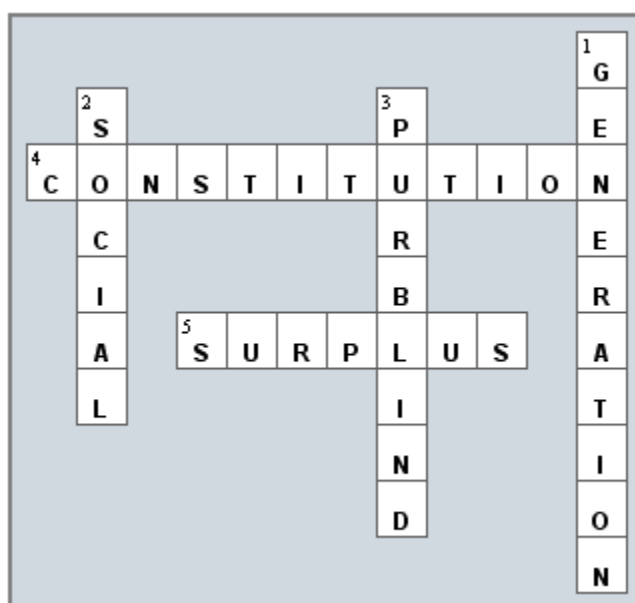
From the Venn Diagram, we get that Conclusions 2 & 3 follow.

Case B:



From the Venn Diagram, we get that none of the conclusions follow.

Answer 13:



Answer 14: Possible words are:

virtual
ritual
virtu
viral
urial
ultra
trial
trail
rival

Answer 15: 99090.

This is an a.p. with $a = 103$ and $d = 5$.

Also, the last term would be 998.

Hence there are $(998 - 103)/5 + 1 = 180$ terms.

Hence, the sum of all the terms in the series is:

$$\begin{aligned} S &= n/2[2a + (n-1)d] \\ &= 180/2[206 + 179 \cdot 5] \\ &= 90[206 + 895] \\ &= 90[1101] \\ &= 99090 \end{aligned}$$

Answer 16: 11/50

Out of the 52 marbles, when I drew 2, there are 50 marbles left.

Out of these, 11 are red marbles.

Hence, the probability that the lost marble is a red one is 11/50

Answer 17: 54 and 75.

Let x be the number of days they were allotted to finish the work.

Hence from the given conditions, we get

$$900/(x-6) - 810/(x-3) = 1$$

On simplifying this equation, we get

$$7x^2 - 93x - 594 = 0$$

Thus $x = 18$.

Thus $x - 3 = 15$ and $x - 6 = 12$.

Thus the first factory produced 54 boxes a day while the other produced 75 boxes a day.

Answer 18: 33264 cu.cm

The height of the cylinder = 10 cm.

Hence total volume = volume of cylinder + volume of hemisphere

$$\begin{aligned} &= \pi \cdot r^2 \cdot h + 1/2 \cdot 4/3 \cdot \pi \cdot r^3 \\ &= 22/7 \cdot 21 \cdot 21 \cdot 10 + 1/2 \cdot 4/3 \cdot 22/7 \cdot 21 \cdot 21 \cdot 21 \\ &= 66 \cdot 210 + 44 \cdot 441 \\ &= 33264 \text{ cu.cm} \end{aligned}$$

[illegible]

blinker
relink
linker
bilker
reink
liner
liker
liken
liber
inkle
inker
brink
brine
blink
birle
biker

Solutions of Online Quiz #35

Answer 1: 8:16 pm.

Let T_1 , D_1 , S_1 and T_2 , D_2 and S_2 be the time taken, distances and speeds of the two buses.

$$D_1 = D_2 = x$$

$$T_1 = 6 \text{ hrs}$$

$$T_2 = 5 \text{ hrs}$$

$$S_1 = x/6 \text{ km/hr}$$

$$S_2 = x/5 \text{ km/hr}$$

$$\text{Distance covered by A in 1 hr} = x/6 \text{ km}$$

$$\text{Distance between the 2 buses at pm} = x - x/6 = 5x/6$$

Both buses are travelling towards each other, their relative speed = $x/6 + x/5 = 11x/30$ km/hr

Time taken by the 2 buses to meet = $(5x/6)/(11x/30) = 2.27 \text{ hrs.} = 2 \text{ hours and } 16 \text{ minutes (approx)}$

Hence, they meet at, 6 pm + 2 hrs and 16 minutes = 8:16 pm

Answer 2: Going by the notations in the previous question:

$$T_1 = 9 \text{ hrs}, T_2 = 8 \text{ hrs}, T_3 = 10 \text{ hrs}$$

$$D_1 = D_2 = D_3 = x$$

$$S_1 = x/9, S_2 = x/8, S_3 = x/10$$

Hence, the ratio of their speeds B : D : E = $1/9 : 1/8 : 1/10 = 40 : 45 : 36$

Answer 3: A haircut.

Answer 4: Be wise with speed; a fool at forty is a fool indeed.

Just remember, once you're over the hill you begin to pick up speed.

Answer 5: To err is human, to blame it on someone else is more human.

The one who says it cannot be done should never interrupt the one who is doing it.

Answer 6: Renegade.

$$5-1-6-7-8 = \text{GRADE}$$

$$5-1-2-4-3 = \text{GREEN}$$

Answer 7: Enthralled.

$$5-1-2-3-9-10 = \text{rented}$$

$$4-6-7-8 = \text{hall}$$

Answer 8: Butter.

Buttercup

Butterfingers

Buttermilk

Answer 9: Tail

Tailtight

Pigtail

Tailspin

Answer 10:



Answer 11: Possible words are:

Grammar
Marram
Magma
Grama
Gamma
Mama
Maar
Gram
Agma

Answer 12: 3 -4 -1 -9 11

Answer 13: 1 -4 -5 3 5

Sequence of steps:

Step 1: $(2^{\text{input}}) - 1$

step 2: Sum of the digits

Step 3: Elements are arranged in the ascending order

Step 4: Step 2 + step 3

Step 5: Each element is subtracted by the element succeeding it.

Answer 14: Raveena.

From the given information, we get the order as:

Prachi > Dino > Urmila = Diana > Anushka > Raveena.

Answer 15: Rs. 6000.

Let the principal be x.

Simple Interest = $(x * 14 * 2) / 100$

Compound Interest = $x[1 + 14/100]^2 - x$

Thus,

$x[114/100]^2 - x - 28x/100 = 117.6$

$$\begin{aligned}x[12996/10000] - x - 0.28x &= 117.6 \\1.2996x - 1.28x &= 117.6 \\0.0196x &= 117.6 \\x &= 117.6/0.0196 \\x &= 6000\end{aligned}$$

Answer 16: 1715 sq.cm

by using Pythagoras' theorem, we get AC = 70 cm.

$$\begin{aligned}\text{The area of the yellow region} &= \text{area of triangle} + \text{area of semi-circle} - \text{area of the sector} \\&= [(1/2) * (56) * (42)] + [(1/2) * (22/7) * 35 * 35] - [(1/4) * (22/7) * 42 * 42] \\&= 1176 + 1925 - 1386 \\&= 1715 \text{ sq.cm}\end{aligned}$$

Answer 17: 24 questions a day.

Let x be the number of days.

SO, the had to create (216/x) questions everyday as per the original plan.

Then as per the information,

$$3(216/x) + (x-4)[216/x + 8] = 232$$

$$648/x + (x-4)(216/x + 8) = 232$$

Solving further, we get

$$8x^2 - 48x - 216 = 0$$

$$\text{Thus, } x^2 - 6x - 27 = 0$$

$$\text{Thus, } x = 9 \text{ or } x = -3$$

x cannot be -3. So, x = 9

$$\text{Hence, } 216/x = 216/9 = 24$$

Answer 18: 332640 ways

5 persons can be picked out of 11 in ${}^{11}C_5$ ways.

They can be arranged among themselves in only 1 way.

The remaining 6 people can be arranged among themselves in 6! ways.

$$\begin{aligned}\text{Hence, the number of ways in which the condition can be satisfied} &= {}^{11}C_5 * 1 * 6! = (11! \\&* 6!)/ (5! * 6!) = 11!/5! = 332640 \text{ ways}\end{aligned}$$

Answer 19:



Answer 20: Possible words are:

Example
Empale
Maple
Expel
Ample
Plea
Peel
Peal
Palm
Pale
Leap
Lamp
Apex

Solutions of Online Quiz #37

Answer 1: 336 Students

No of students who took chemistry = $90/360 * 1920 = 480$

Out of these, 30% failed. Hence, no of students who passed = $70/100 * 480 = 336$

Answer 2: 3 : 1

No of students who took maths = $45/360 * 1920 = 240$

Out of these, 15% failed. Hence, no of students who failed = $15/100 * 240 = 36$

No of students who took physics = $22.5/360 * 1920 = 120$

Out of these, 10% failed. Hence, no of students who failed = $10/100 * 120 = 12$

Hence the ratio of students who failed in maths to those who failed in physics = $36 : 12 = 3 : 1$

Answer 3: 79.06%

No of students who took English = $67.5/360 * 1920 = 360$

Out of these, 25% failed. Hence, no of students who failed = $25/100 * 360 = 90$

No of students who took Hindi = $78.75/360 * 1920 = 420$

Out of these, 20% failed. Hence, no of students who failed = $20/100 * 420 = 84$

No of students who took maths = $45/360 * 1920 = 240$

Out of these, 15% failed. Hence, no of students who failed = $15/100 * 240 = 36$

No of students who took physics = $22.5/360 * 1920 = 120$

Out of these, 10% failed. Hence, no of students who failed = $10/100 * 120 = 12$

No of students who took chemistry = $90/360 * 1920 = 480$

Out of these, 30% failed. Hence, no of students who failed = $30/100 * 480 = 144$

No of students who took biology = $56.25/360 * 1920 = 300$

Out of these, 12% failed. Hence, no of students who failed = $12/100 * 300 = 36$

Hence, No of students who failed = 402

Hence, no. of students who passed = $1920 - 402 = 1518$

Hence, pass percentage = $1518/1920 * 100 = 79.06\%$

Answer 4: Rampage

5-6-7 : Age

1-2-3-4 : Ramp

Answer 5: Gesture

1-5-7-3-4 : Guest

6-2-3-4 : Rest

Answer 6: -3.

The equation translates to: $(51+26-78*25/5*8+11*4-1)/1000 = -3$

Answer 7: 1800

The equation translates to: $125/25*78+98-55/11+87+1263-33 = 1800$

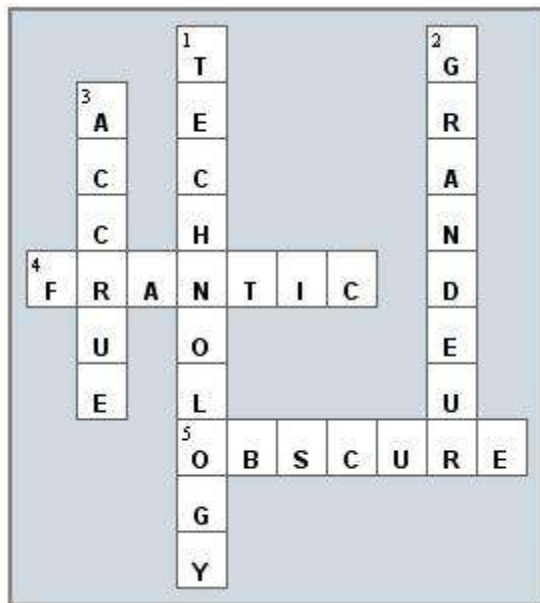
Answer 8: sequacious

rubicund

reconnaissance

pantomime

Answer 9:



Answer 10: Possible words are:

Engrave
Avenger
Regave
Greave
Graven
Genera
Enrage
Avenge

Answer 11: line

beeline
deadline
lineman

Answer 12: stand

washstand
newsstand
standpipe

Answer 13: 68 46 14 82 25

Answer 14: 16 11 13 22 20

Sequence of steps:

Step 1: $2 * \text{input} - 1$

Step 2: $\text{step 1}^2 + 1$

Step 3: $\text{step 2} / 2$

Step 4: first and third digit are added positioned at the first place.

Step 5: digits are reversed

Answer 15: $1/36$

The probability that pink appeared on the first toss is $2/6$.

The probability that black appeared on the second toss is $3/6$.

The probability that green appeared on the third toss is $1/6$.

Hence, the probability that pink appeared on the first toss, black on the second and green on the third is $2/6 * 3/6 * 1/6 = 1/36$

Answer 16: $1/126$

The boys can be arranged in $5!$ ways.

There are two possible arrangements:

1. B G B G B G B G B G

Here the girls can be arranged in $5!$ ways.

Hence this arrangement is possible in $5!5!$ ways.

2. G B G B G B G B G B

Here the girls can be arranged in $5!$ ways.

Hence this arrangement is possible in $5!5!$ ways.

Hence the total number of ways in which this is possible is $5!5! + 5!5!$ ways = $2*5!*5!$ ways.

5 boys and 5 girls can be arranged among themselves in $10!$ ways.

Hence, the required probability is: $2*5!*5!/10! = 1/126$

Answer 17: 8245500

A series in a.p. is formed here with:

first term, $a = 1000$

common difference, $d = 6$

last term, $t = 9994$

number of terms, $n = (t-a/d) + 1 = 8994/6 + 1 = 1500$

The sum of the first 1500 terms of the series = $(1500/2) * (1000 + 9994) = 8245500$

Answer 18: 67

The total weight of the 40 students is : $73 * 40 = 2920$

The weight of the 10 students : $10 * 90 = 900$

The weight of the remaining 30 students = $2920 - 900 = 2020$

Hence, their average weight = $2020/30 = 67.33$ (rounded off to 67)

Answer 19:



Answer 20: Possible words are:

Regrate
Greater
Tearer
Retear
Regret
Regear
Grater
Garter
Garret
Ergate

Solutions of Online Quiz #39

Answer 1: 38%.

Answer 2: 46%

Answer 3: 82%

Detailed solution:

From the given info,

Number of students who have passed in Sociology alone = $100 - 45 - 15 - 30 = 10$

Number of students who have passed in Psychology alone = $125 - 30 - 45 - 25 = 25$

Number of students who have passed in Geography alone = $90 - 45 - 25 - 15 = 5$

Number of students who passed in at least 1 subject = $125 + 10 + 15 + 5 = 155$

So, number of students who failed = $250 - 155 = 95$

So, percentage of students who failed in all 3 = $95/250 * 100 = 38\%$

Number of students who passed in 2 or more subjects = $30 + 25 + 45 + 15 = 115$

So, percentage of students who passed in 2 or more subjects = $115/250 * 100 = 46\%$

Number of students have failed in at least 1 subject = $250 - 45 = 205$

So, percentage of students have failed in at least 1 subject = $205/250 * 100 = 82\%$

Answer 4: arm.

armchair

firearm

armpit

Answer 5: buck.

bucktooth

buckskin

roebuck

Answer 6: Love lights more fires than hate extinguishes.

He that lives forever, never fears dying.

Answer 7: Blood is inherited; character is earned.

A person's character reaches town before the person does.

Answer 8: Forensic

6-7-5-8-4 : SINCE

1-2-3-8-4 : FORCE

Answer 9: Enervate

2-3-5-1-4 : NEVER

4-6-7-8 : RATE

Answer 10:



Answer 11: Possible words are:

village
vagile
glaive
villa
legal
ileal
glial
gavel
alive
agile

Answer 12: 10 20 59 60 80

Answer 13: 6 13 14 19 12

Sequence of steps:

Step 1: Add 7 to the first element, 8 to the second element and so on....

Step 2: Subtract 10 from the first element, 9 from the second and so on...

Step 3: Reverse the digits of each element and and shift the elements left.

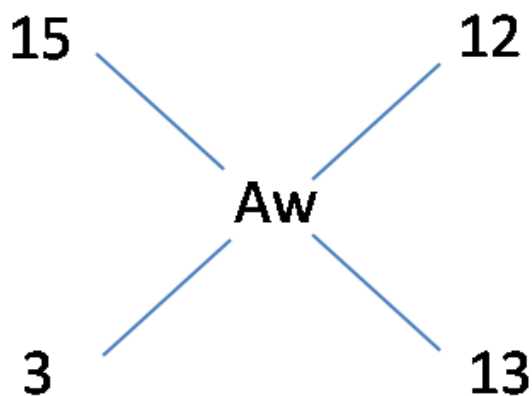
Step 4: Arrange the elements in increasing order.

Step 5: Add 9 to each element.

Answer 14:



Answer 15: Rs. 12.56



By the alligation rule,
 $3 : 13 = (12 - Aw) : (Aw - 15)$
 Thus, $3Aw - 45 = 156 - 13Aw$
 On simplifying, we get:
 $16Aw = 201$
 Thus, $Aw = 12.56$

Answer 16: 29

The smallest number divisible by 7 that lies between 1300 and 1500 is 1302.
 The largest number divisible by 7 that lies between 1300 and 1500 is 1498.
 Hence,
 $[(1498 - 1302) / 7] + 1 = 29$ terms lie between 1300 & 1500.

Answer 17: 14.52 km/hr

Let the total distance be x.

For the 1st third of the journey, $D = x/3$ and $T = (x/3)/25 = x/75$

For the 2nd third of the journey, $D = x/3$ and $T = (x/3)/15 = x/45$

For the 3rd third of the journey, $D = x/3$ and $T = (x/3)/10 = x/30$

Hence,

$$\begin{aligned} \text{Average speed} &= \text{Total Distance} / \text{Total Time} = x / (x/75 + x/45 + x/30) \\ &= x / (6x + 10x + 15x/450) = 450/31 = 14.52 \end{aligned}$$

Answer 18: Rs. 6620

Let the original price be Rs. x .

Thus, B purchased it at Rs. $1.25x$

A purchased it back at $(1.3 * 1.25x =)$ Rs. $1.625x$

B's profit = $1.625x - 1.25x = 0.375x =$ Rs. 2482.5

Thus, $x = 6620$

Answer 19: The expression translates to:

$$[(66+38)/(128/16)] - [(565/113)*(119-116)] = -2$$

Answer 20: The expression translates to:

$$[(119r17)e(75r5)]q[(144r16)w(52r26)] = 112$$

Solutions of Online Quiz #41

Answer 1: 18 Students

No of students who took science = $18/360 * 600 = 30$

Out of these, 40% passed. Hence, no of students who failed = $60/100 * 30 = 18$

Answer 2: 11 : 12

No. of students who took Maths = $150/360 * 600 = 250$

Out of these, 44% passed. Hence, no of students who passed = $44/100 * 250 = 110$

No of students who took English = $90/360 * 600 = 150$

Out of these, 80% passed. Hence, no of students who passed = $80/100 * 150 = 120$

Hence the ratio of students who passed in Maths to those who passed in English = $110 : 120 = 11 : 12$

Answer 3: 64%

No of students who took English = $90/360 * 600 = 150$

Out of these, 80% passed. Hence, no of students who passed = $80/100 * 150 = 120$

No of students who took Hindi = $60/360 * 600 = 100$

Out of these, 92% passed. Hence, no of students who passed = $92/100 * 100 = 92$

No of students who took Marathi = $30/360 * 600 = 50$

Out of these, 70% passed. Hence, no of students who passed = $70/100 * 50 = 35$

No of students who took Maths = $150/360 * 600 = 250$

Out of these, 44% passed. Hence, no of students who passed = $44/100 * 250 = 110$

No of students who took Science = $18/360 * 600 = 30$

Out of these, 40% passed. Hence, no of students who passed = $40/100 * 30 = 12$

No of students who took Social Studies = $12/360 * 600 = 20$

Out of these, 65% passed. Hence, no of students who passed = $65/100 * 20 = 13$

Hence, No of students who passed = 382

Hence, pass percentage = $382/600 * 100 = 63.67\%$

Answer 4: IMPLIED

1-2-3 : IMP

4-5-6-7 : LIED

Answer 5: MEAGRE

3-5-6 : ARE

4-3-1-2 : GAME

Answer 6: Back.

backtrack

backlog

horseback

Answer 7: over

overcook

overcrowd

overlay/layover

Answer 8: If you are going to do something tonight that you'll be sorry for in the morning, sleep late.

Reach for the stars, even if you have to stand on a cactus.

Answer 9: Never say no due to pride, or yes due to weakness.

Christmas is a time when everyone wants his past forgotten and the present remembered!

Answer 10:



Answer 11: Possible words are:

defence
fenced
fence
need
fend
feed
dene
cede

Answer 12: Distribution

Symmetry

Development

Enrolment

Answer 13: 85 108 44 51 72

Answer 14: 72 105 20 160 147

Sequence of steps:

Step 1: The digits of each element are reversed

Step 2: Step 1 - 7

Step 3: The square of the sum of the digits of each element is calculated

Step 4: Every element is subtracted by the element to its immediate right

Step 5: The modulus of each element is taken and the element is shifted left

Answer 15: 18.44 cm

The area of a trapezium = $\frac{1}{2} \times \text{sum of parallel sides} \times \text{height}$

The height = $\text{area} \times 2 / \text{sum of parallel sides}$

Hence, height = $198 \times 2 / 33 = 12 \text{ cm}$

In triangle BAC,

By Pythagoras' theorem

BC = Square root of $(12^2 + 14^2) = 18.44 \text{ cm}$

Answer 16: 24 years

Let the common ratio be x.

Hence, $8x + 5x + 2x = 15 \times 3$

Hence, $15x = 45$

Hence, $x = 3$

the age of the oldest daughter is $8x = 24 \text{ years}$

Answer 17: 45 and 25.

Let the father's age be x and that of the son be y.

$x + y = 70 \dots (1)$

Also, $x = 9 (y - (x - y))$

$x = 9 (2y - x) \dots (2)$

substituting eq. (2) in eq. (1), we get

$9 (2y - x) + y = 70$

Thus,

$-9x + 19y = 70 \dots (3)$

Multiplying eq. (1) by 9 and adding it to eq. (3), we get

$-9x + 19y = 70$

$9x + 9y = 630$

$28y = 700$

$y = 25$

Thus, $x = 70 - 25 = 45$

Answer 18: 4/165

The 11 letters can be rearranged in 11! ways.

But, S & I have be repeated 4 times and P 2 times.

Hence, sample space, $n(S) = 11! / (4! \times 4! \times 2!)$

If the I's are together, they need to be considered as a single entity.

Hence, the 8 entities can be rearranged in 8! ways

But S is repeated 4 times and P 2 times.

Hence, $n(E) = 8!/(4! * 2!)$

$P(E) = n(E)/n(S) = 8! * 4! / 11! = 4/165$

Answer 19: 1.

The expression translates to : $(45/5 - 6 * 56 - 9) / 112 * 1/3 + 2 = 1$

Answer 20: 100

The expression translates to : $(20 + 720/12 + 252 + 78 * 8 - 51 - 5) / 9 = 100$