

SAMPLE PAPER-II

Based on Class 8 Syllabus

Time Allowed : 3 hrs

Maximum Marks : 100

MATHEMATICS

Q1. A simple closed curve made up of only _____ is called a polygon .

- (a) curves (b) line segments (c) lines (d) closed curves

Answer : (b)

Q2. Maximum number of right angles in a right angled triangle are

- (a) 2 (b) 1 (c) 3 (d) 0

Answer : (b)

Q3. The angle sum of all interior angles of a convex polygon of sides 7 is

- (a) 180° (b) 540° (c) 630° (d) 900°

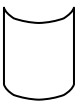

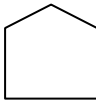
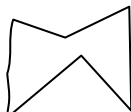
Answer : (d)

Q4. The number of sides in a regular polygon is 15 , then measure of each exterior angle is

- (a) 24° (b) 36° (c) 20° (d) 18°

Answer : (a)

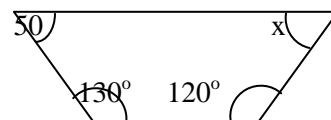
Q5. Which of the following polygons is convex polygon ?

- (a)  (b)  (c)  (d) 

Answer : (c)

Q6. The value of (x) in the following figure is

- (a) 120° (b) 80°
(c) 100° (d) 60°



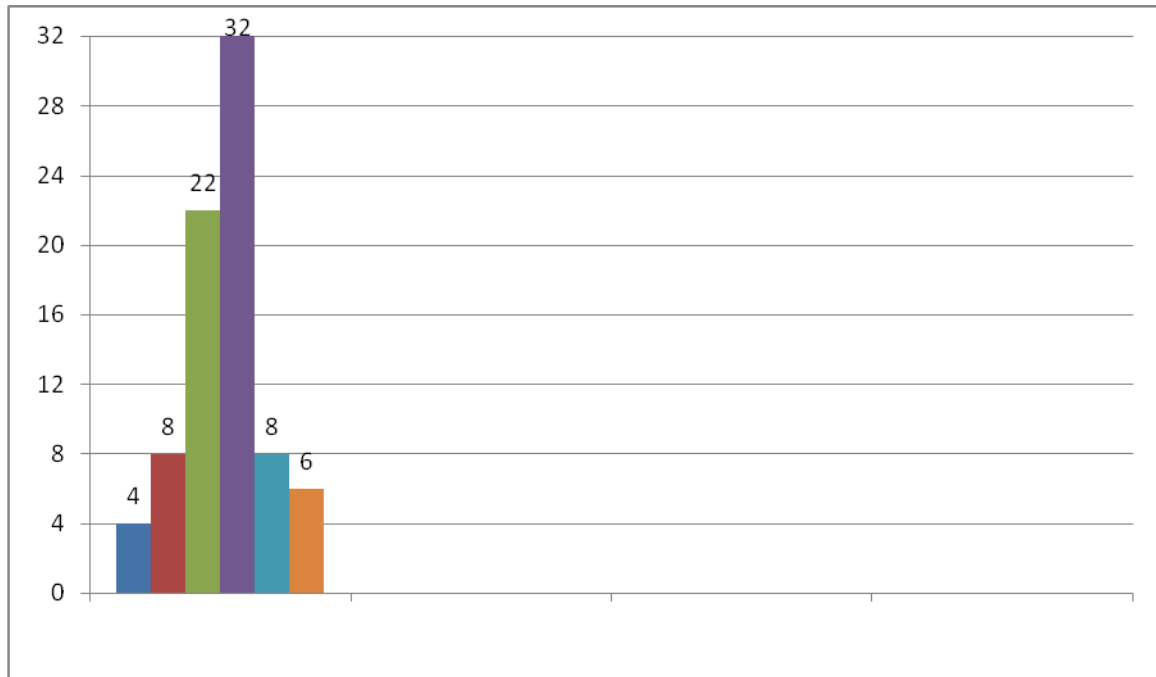
Answer : (d)

Q7. The diagonals of a square bisect each other at _____ angle.

- (a)acute (b)right (c)obtuse (d)reflex

Answer : (b)

The number of hours for which students of particular class watched television during holidays is shown through the graph given below:



See the graph given above and answer the following questions (Q8-Q12)

Q8. For how many hours did the maximum number of students watch TV ?

- (a) 4-5 hrs (b) 6-7 hrs (c) 3-4 hrs (d) 2-3hrs

Answer : (a)

Q9 How many students watched TV for less than 4 hrs ?

- (a) 12 (b) 34 (c) 4 (d) 8

Answer : (b)

Q10. How many students spent more than 5 hrs in TV watching ?

- (a) 14 (b) 0 (c) 6 (d) 8

Answer : (a)

Q11. For how many hours did the minimum number of students watch TV ?

- (a) 2-3 hrs (b) 6-7 hrs (c) 1-2 hrs (d) 3-4hrs

Answer : (c)

Q12. How many students spent less than 5 hrs in TV watching ?

- (a) 34 (b) 32 (c) 8 (d) 66

Answer : (a)

Q13. Numbers 1 to 10 are written on ten separates slips (one number on one slip), kept in a box and mixed well. One slip is chosen from the box without looking in to it . What is the probability of getting a number 6?

- (a) 1 (b) 0 (c) $\frac{1}{10}$ (d) $\frac{1}{2}$

Answer : (c)

Q14. Which of the following is not a square number?

- (a) 4 (b) 9 (c) 16 (d) 24

Answer : (d)

Q15. Which of the following is a perfect square ?

- (a) 45 (b) 81 (c) 18 (d) 54

Answer : (b)

Q16. How many natural numbers lie between 9^2 and 10^2 ?

- (a) 15 (b) 19 (c) 18 (d) 17

Answer : (c)

Q17. By which smallest number 90 must be multiplied so as to make it a perfect square ?

- (a) 10 (b) 2 (c) 5 (d) 3

Answer : (a)

Q18 What will be the number of digits in the square root of 1296?

- (a) 2 (b) 3 (c) 1 (d) 4

Answer : (a)

Q19 What is the length of the diagonal of a rectangle having dimensions 3cm and 4cm?

- (a) 5 (b) 7 (c) 1 (d) 4

Answer : (a)

Q20. Which of the following is not a perfect cube ?

- (a) 1 (b) 9 (c) 8 (d) 27

Answer : (b)

Q21. Which of the following is Hardy-Ramanujan Number ?

- (a) 1724 (b)1725 (c) 1727 (d) 1729

Answer : (d)

Q22: The number of terms in the expression $2x^2+3x+5$ is

- (a) 1 (b) 2 (c)3 (d)5

Answer : (c)

Q23:The expression $y+z+100$ is a

- (a) monomial (b) literal number
(c) binomial (d) trinomial

Answer : (d)

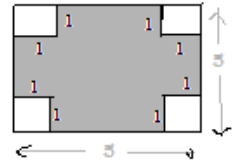
Q24:The addition of $ab-bc, bc-ca, ca-ab$ is

- (a) $3ab+3bc+3ca$ (b) 0
(c) $ab+bc+ca$ (d) $ab-bc+ca$

Answer : (b)

Q25. In fig., a square of side 5 cm, the area of shaded portion is

- (a) 9000 cm^2 (b) 90 cm^2 (c) 9 cm^2 (d) 900 cm^2



Answer : (c)

SCIENCE:

Q26.Nowadays seed is sown in the field using

- a)Seed Tractor b)Seed drill
c)Seed Tiller d)Seed Plough

Answer : (b)

Q27.Rhizobium (a Bacteria) which fixes atmospheric nitrogen are found in nodules growing in

- a)Roots of leguminous plants b) Leaves of leguminous plants
c)Stem of Leguminous plants d) All of the above.

Answer : (a)

Q28.Examples of Multicellular Microorganism are

- a)Algae, Bacteria b) Bacteria and Fungi
c)Bacteria and Viruses d) Algae and Fungi

Answer : (d)

Q29.Some medicines obtained from micro-organisms are applied to kill or stop the growth of disease-causing microorganisms. Such medicines are called _____.

- a)Antibodies
c)Antiseptics
- b) Antibiotics
d) All of the above

Answer : (b)

Q30.The process of conversion of sugar into alcohol by yeast is called

- a)Fermentation
c)Alcoholism
- b) Pasteurisation
d) All of the above

Answer : (a)

Q31.A chain of small chemical units combined to form a large single unit is called _____

- a)Polymer
c)Polythene
- b) Poly
d) None of the above

Answer : (a)

Q32 .The 4 R Principle is

- a)Reduce, Reuse, Recycle, Recover
c)Repeat, Rejoice, recycle, reduce
- b) Remember, reduce, Recycle, Rejoice
d) None of the above

Answer : (a)

Q33.The property of metal by which it can be drawn into wires is called _____

- a)Ductility
c)Metallic
- b) Sheetability
d) Malleability

Answer : (a)

Q34.The metal found in liquid state is

- a)Iron
c)Mercury
- b)Aluminium
d)Gold

Answer : (c)

Q36.Resources present in unlimited quantity in nature and are not likely to be exhausted by human activities are called

- a)Exhaustible Natural Resources
c)Exhaustible Resources
- b) Inexhaustible Natural Resources
d) None of the above

Answer : (b)

Q37.Black gold is actually

- a)Gold which became black on burning
c)Gold sold in black market
- b) Petroleum
d) Diamond

Answer : (b)

Q38. A chemical process in which a substance reacts with oxygen to give off heat is called

- a) Conduction
- b) Conjunction
- c) Combustion
- d) Confusion

Answer : (c)

Q39. Part of the earth which supports life where living beings exist is called _____

- a) Atmosphere
- b) Biosphere
- c) Biology
- d) Biodiversity

Answer : (b)

Q40. Variety of organisms existing on the earth, their interrelationships and their relationship with the environment is called

- a) Diversity
- b) Biosphere
- c) Biology
- d) Biodiversity

Answer : (d)

Q41. Hen's egg is

- a) An organ
- b) A Single cell
- c) A tissue
- d) Is none of the above

Answer : (b)

Q42. Which of the following cells can change its shape

- a) White blood cell
- b) Egg cell
- c) Red blood cell
- d) All of the above

Answer : (a)

Q43. Robert Hooke first observed

- a) Nucleus
- b) Cells
- c) organs
- d) virus

Answer : (b)

Q44. A cell without organized nucleus is called

- a) Prokaryotic cell
- b) Eukaryotic cell
- c) Virus
- d) None of the above

Answer : (a)

Q45. Larynx is also called

- a) Voice box
- b) Sound box

Q.53.What is Sodium Carbonate commonly known as ?

- a.Soda Water b.Acid c.Washing Soda d.Preservative

Answer – c

Q.54.Name India’s first research station in the Artic ?

- a.Himadri b.Chanakya c.India A d.Rohini

Answer - a

Q.55. Who is the current Home Minister of India ?

- a.Arun Jaitley b.P.Chidambaram c.Rajnath Singh d.Sushma Swaraj

Answer – c

Q.56.Which was India’s first full length motion picture ?

- a.Mahabharatha b.Raja Harishchandra c.Aan d.Barsaat

Answer- b

Q.57.Who delivered the famous Gettysburg Speech ?

- a.Winston Churchill b.Swami Vivekananda c.Abraham Lincoln d.John F Kennedy

Answer – c

Q.58.Name India’s first indigenously developed supercomputer ?

- a)Saga b)Param c)Vikram d)Aadithya

Answer –b

Q.59.Who wrote the novel-Midnight’s Children ?

- a)Bisham Sahni b)Anita Desai c)Salman Rushdie d)R K Narayan

Answer - c

Q.60.Who is the author of the book-20,000 leagues under the sea ?

- a) Jules Verne b)Harper Lee c)Charles Dickens d)Arthur Conan Doyle

Answer - a

Q.61.Which actor has played the part of the famous fictional detective –Hercule Poirot the maximum number of times ?

- a)Peter Ustinov b)David Suchet c)Albert Finney d)Austin Trevor

Answer - b

Q.62.Which sports persons nickname is “Black Pearl” ?

a) Usain Bolt b)Vivian Richards c)Pele d)Yohan Blake

Answer - c

Q.63.In which city is Kremlin Situated ?

a)St.Perersburg b)Prague c)Kiev d)Moscow

Answer – d

Q.64.What is the capital of the state of Tripura ?

a) Dispur b) Agartala c) Itanagar d)Kohima

Answer-b

Q.65.Shantiniketan is associated with which famous personality ?

a)Satyajit Ray b) Raja Ram Mohan Rao c) Rabindra Nath Tagore d) Swami Vivekananda

Answer – c

Q.66.The Channel Tunnel connects which two countries ?

a.Germany and Poland b.France and England c.Spain and France d.Germany and Belgium

Answer - b

Q.67.What was the name of the spacecraft in which Yuri Gagarin travelled in space ?

a.Apollo b.Voshkod 2 c.Vostok I d.Sputnik

Answer – c

Q.68.Vincent Van Gogh is a famous _____.

a)Writer b)Pianist c)Painter d)Opera Singer

Answer – c

Q.69.Who is the founder of Twitter-the social networking site?

a)Jack Dorsey b) Steve Jobs c)Sabeer Bhatia d)Vinod Dham

Answer – a

Q.70.Which is the country in which Emiliano Zapata led a peasant uprising ?

a)Bolivia b) Peru c)Mexico d)Cuba

Answer – c

Q.71.Where is the National Defence Academy located?

a) Mhow b)Bhopal c)Pune d)Khadakvasala

Answer – d

Q.72. In which state is the Kaziranga National Park situated ?

a) Manipur b) West Bengal c) Assam d) Madhya Pradesh

Answer – c

Q.73. Rani Ahilya Bai was the ruler of which princely state ?

a) Jodhpur b) Indore c) Pune d) Ajmer

Answer – b

Q.74. Where is the Wailing Wall located ?

a) Berlin b) Tel Aviv c) Jerusalem d) Amman

Answer - c

Q.75. Which famous author has written the novel *Inferno*, based on which a Hollywood movie is being made?

a) Sidney Sheldon b) Dan Brown c) Irving Wallace d) Colin Forbes

Answer - b

MENTAL ABILITY

Q.76. Look at this series: 8, 43, 11, 41, __, 39, 17, . . . What number should fill in the blank?

a. 8 b. 14 c. 43 d. 44

Answer – b This is a simple alternating addition and subtraction series. The first series begins with 8 and adds 3; the second begins with 43 and subtracts 2.

Q.77. Look at this series: 15, __, 27, 27, 39, 39, . . . What number should fill the blank?

a. 51 b. 39 c. 23 d. 15

Answer – d

In this simple addition with repetition series, each number in the series repeats itself, and then increases by 12 to arrive at the next number.

Q.78. Look at this series: 83, 73, 93, 63, __, 93, 43, . . . What number should fill the blank?

a. 33 b. 53 c. 73 d. 93

Answer – b

This is a simple subtraction series in which a random number, 93, is interpolated as every third number. In the subtraction series, 10 is subtracted from each number to arrive at the next.

Q.79. Here are some words translated from an artificial language.

lelibroon means yellow hat

plekafroti means flower garden

frotimix means garden salad

Which word could mean “yellow flower”?

- a. lelifroti b. lelipleka c. plekabroon d. frotibroon

Answer – b

Leli means yellow; *broon* means hat;

Pleka means flower; *froti* means garden; *mix* means salad.

Therefore, *lelipleka* means yellow flower.

Q.80. Here are some words translated from an artificial language.

moolokarn means blue sky

wilkospadi means bicycle race

moolowilko means blue bicycle

Which word could mean “racecar”?

- a. wilkozwet b. spadiwilko c. moolobreil d. spadivolo

Answer – d

From *wilkospadi*, you can determine that *wilko* means bicycle and *spadi* means race. Therefore, the first part of the word that means racecar should begin with *spadi*. That limits your choices to **b** and **d**. Choice **b**, *spadiwilko*, is incorrect because we have already determined that *wilko* means bicycle. Therefore, the answer must be choice **d**, *spadivolo*.

Q.81. Here are some words translated from an artificial language.

daftafoni means advisement

imodafta means misadvise

imolokti means misconduct

Which word could mean “statement”?

- a. kratafoni b. kratadafta c. loktifoni d. daftaimo

Answer – a

Dafta means advise; *foni* is the same as the suffix *-ment*; *imo* is the same as the prefix *mis-*; *lokti* means conduct. Since the only word in the answer choices that hasn’t been defined is *krata*, it is reasonable to assume that *krata* means state. Therefore, *kratafoni* is the only choice that could mean statement.

Q.82. Here are some words translated from an artificial language.

dionot means oak tree

blyonot means oak leaf

blycrin means maple leaf

Which word could mean “maple syrup”?

- a. blymuth b. hupponot c. patricrin d. crinweel

Answer – c

In this language, the adjective follows the noun.

From *dionot* and *blyonot*, you can determine that *onot* means oak. From *blyonot* and *blycrin*, you can determine that *bly* means leaf. Therefore, *crin* means maple. Because the adjective maple comes after the noun, *patricrin* is the only possible choice.

Q.83. Here are some words translated from an artificial language.

agnoscrenia means poisonous spider

delanocrenia means poisonous snake

agnosdeery means brown spider

Which word could mean “black widow spider”?

- a. deeryclostagnos b. agnosdelano c. agnosvitribulunin d. trymuttiagnos

Answer - c

In this language, the noun appears first and the adjectives follow. Since *agnos* means spider and should appear first, choices a and d can be ruled out. Choice b can be ruled out because *delano* means snake.

Q.84. A *Guarantee* is a promise or assurance that attests to the quality of a product that is either (1) given in writing by the manufacturer or (2) given verbally by the person selling the product.

Which situation below is the best example of a Guarantee?

- a. Aruna purchases a DVD player with the highest consumer ratings in its category.
 b. The salesperson advises Ajay to be sure that he buys an air conditioner with a guarantee.
 c. The local car repair shop specializes in refurbishing and selling used cars.
 d. Manoj buys a used digital camera from his colleague who says that he will refund Manoj’s money if the camera’s performance is not of the highest quality.

Answer –d

Choices a, b, and c do not describe situations in which a product is guaranteed. Only choice d reflects a situation in which a seller attests to the quality of a product by giving the buyer a promise or assurance about its quality.

Q.85. *Embellishing the Truth* occurs when a person adds fictitious details or exaggerates facts to true stories. Which situation below is the best example of Embellishing the Truth?

- a. Amita goes to the theater, and the next day, she tells her co workers she thought the play was excellent.
 b. The real estate agent describes the house, which is 2 kms away from the ocean, as prime waterfront property.
 c. During the job interview, Vijay, who has been teaching primary school for ten years, describes himself as a very experienced teacher.
 d. The hockey coach says it is likely that only the most talented players will get a college scholarship.

Answer – b

The real estate agent is using a clear exaggeration when he states that a house which is 2 Km away from the ocean is prime waterfront property.

Q.86. An *Informal Gathering* occurs when a group of people get together in a casual, relaxed manner. Which situation below is the best example of an Informal Gathering?

- a. The book club meets on the first Thursday evening of every month.
 b. After finding out about his promotion, Anil and a few colleagues from office decide to go out for a quick snack after work.
 c. Karishma sends out 25 invitations for the birthday party she is giving for her sister.
 d. Whenever she eats at the South Indian restaurant, Tanushree seems to run into Mr Biswas.

Answer - b

After getting some good news, Anil and a few colleagues casually get together for a drink after work, thereby having an informal gathering.

Choices a and c describe more formal types of gatherings. Choice d describes a chance or coincidental kind of meeting.

Q.87. What is the next letter in the series given below ?

D, F, I, M, ?

a. S b. R c. O d. Q

Answer - b

Between first 2 letters, one letter is skipped, the two, and then three and so on. Hence, after M, 4 letters will be skipped i.e. N, O, P, Q will be skipped. Therefore R will be the next letter.

Q.88. Which number will replace the question mark in the following series :

0, 6, 24, 60, 120, 210, ?

a. 240 b. 290 c. 336 d. 504

Answer - The given series is :

$1^3 - 1, 2^3 - 2, 3^3 - 3$, and so on.

Hence, $7^3 - 7 = 343 - 7 = 336$

Q.89. Which word out of the following four does NOT belong with the others?

a. fair b. just c. equitable d. favourable

Answer - d

Fair, just, and equitable are all synonyms meaning impartial. Favorable means expressing approval.

Q.90. Which word does NOT belong with the others?

a. defendant b. prosecutor c. trial d. judge

Answer - c

Defendant, prosecutor, and judge are all persons involved in a trial. A trial is not a person.

Q.91. Today is Friday. After 62 days, what day will it be?

a. Saturday b. Monday c. Tuesday d. Thursday

Answer - d

Each day of the week is repeated after 7 days. Hence after 63 days it will be Friday (7×9 weeks = 63 days). Therefore 62nd day will be Thursday.

Q.92. Kamla is 42 weeks older to me, while Anuradha is 15 weeks older to her. If Anuradha was born on a Saturday, then on which day was I born.

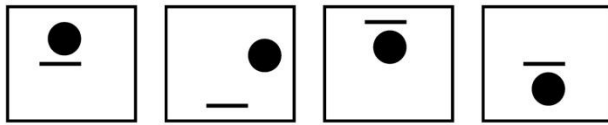
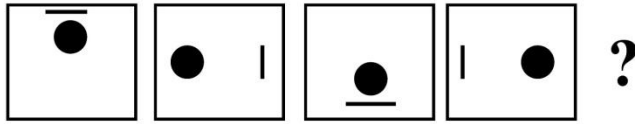
a. Monday b. Wednesday c. Saturday d. Sunday

Answer - c

Difference between my age and Anuradha's age = $42 + 15 = 57$ weeks.

Since each day of the week is repeated after 7 days and Anuradha was born on a Saturday and the difference is a clear 57 weeks, then my birthday is also on a Saturday .

Q.93. What comes next in the following series ?



a

b

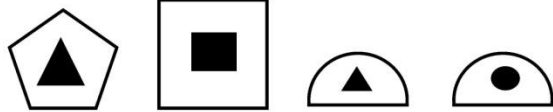
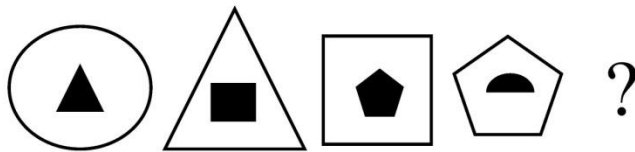
c

d

Answer – c

The circle is moving anti clockwise and the line is moving clockwise.

Q.94. What comes next in the series below ?



a

b

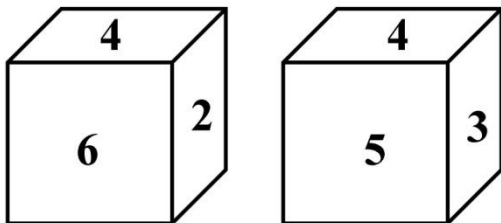
c

d

Answer – d

As the series progresses ,the inner figure becomes the outer figure and a new small figure appears inside .

Q.95. Two different positions of a dice are given below. Which number will appear on the opposite side of Face “4” ?



a.2

b.1

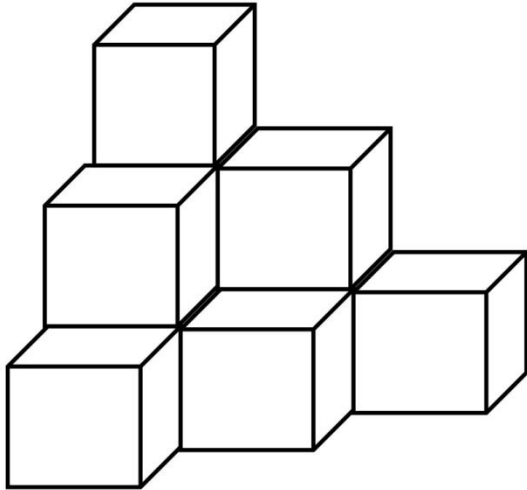
c.6

d. None of the above

Answer – b

We can see that 2,6,5 and 3 are adjacent faces of “4”.
Therefore the opposite face of “4” must be the one which has “1” on it.

Q.96. How many cubes are there in the given figure?



- a.12
- b.14
- c.10
- d.8

Answer –c

In the above figure,there is :

One column with 3 cubes ,two columns with with 2 cubes each and three columns with 1 cube each.

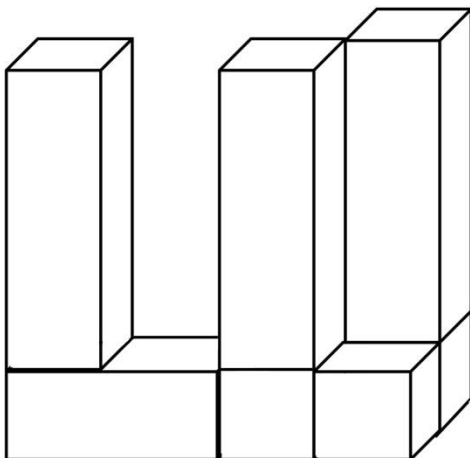
No of cubes in column of 3 cubes = $1 \times 3=3$

No of cubes in column of 2 cubes = $2 \times 2=4$

No of cubes in column of 1 cube = $3 \times 1=3$

Therefore,Total No of cubes = $3 + 4 + 3=10$

Q.97. Count the number of blocks in the given figure.



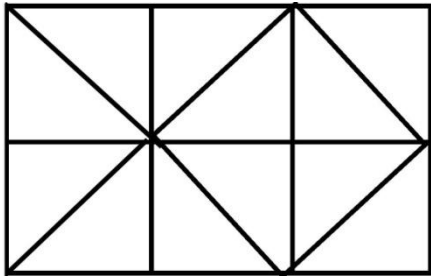
- a.6
- b.7

- c.8
- d.9

Answer – b

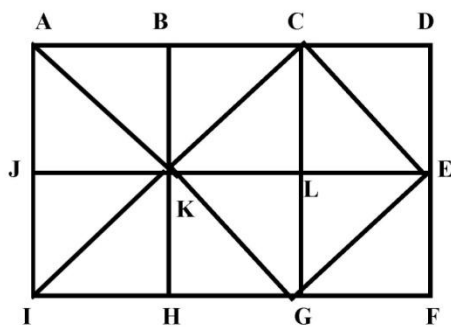
There are 4 blocks in the lower layer close to the ground. Then there are 3 blocks standing over the lower layer. Hence, $4 + 3 = 7$ blocks.

Q.98. How many squares does the following figure have ?



- a.7
- b.6
- c.10
- d.9

Answer – d



The squares are : ABKJ, BCLK, CDEL, LEFG, KLGH, JKHI, KCEG, ACGI, BDFH ie 9 squares.

Q.99. Find the missing number ?

11	3	21
5	19	?
7	13	30

- a.46
- b.36
- c.25
- d.20

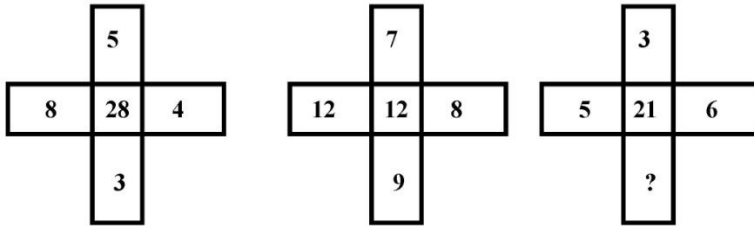
Answer – b

$$11 + 3 = 14 ; 14/2 = 7 ; 7 \times 3 = 21$$

$$7 + 13 = 20 ; 20/2 = 10 ; 10 \times 3 = 30$$

$$\text{Hence : } 5 + 19 = 24 ; 24/2 = 12 ; 12 \times 3 = 36$$

Q.100. Find the missing number ?



- a.1
- b.-1
- c.2
- d.-2

Answer – b

$$(8 \times 5) - (4 \times 3) = 28$$

$$(12 \times 7) - (8 \times 9) = 12$$

Hence :

$$(5 \times 3) - (6 \times X) = 21$$

$$15 - 6X = 21$$

$$-6X = 6$$

Therefore, $X = -1$