

Table chart

Directions (1-5): Read the following information carefully and answer the questions given below.

The given table chart shows the number of laptops, phones and Cameras sold in three different months namely January, February and March.

Months	Number of	Number of	Number of
	laptops	phones	cameras
	sold	sold	sold

January	99	81	72
February	48	64	85
March	82	38	65

- 1) The number of cameras sold in January is what percentage more or less than the number of laptops sold in February?
- a) 25% less
- b) 50% more

c) 10% less

d) 15% more

e) 35% more

Answer: B

Required percentage = (72 - 48)/48 * 100 = 24/48

* 100 = 50% more

2)If the number of cameras sold in April is 20% less than that of February, then find the difference between the number of cameras sold in March and April.

a)9

b)7

c)5

d)3

e) 1

Answer: D

Number of cameras sold in April = 85 * 80/100 =

68

Required difference = 68 - 65 = 3

3) Find the average number of phones sold in all the three months together.

a) 50

b) 58

c) 65

d) 61

e) 40

Answer: D

Required average = (81 + 64 + 38)/3 = 183/3 = 61

4) Find the ratio of the total number of laptops sold in February and March together to the total number of cameras sold in February and March together.

a)15:14

b)13:15

c)6:17

d)17: 15

e) 12:19

Answer:B

Required ratio = (48 + 82):(85 + 65) = 13 : 15

5)Find the difference between the number of phones sold in January and the number of cameras sold in March.

a)22

b)30

c)16

d)25

e) 12

Answer: C

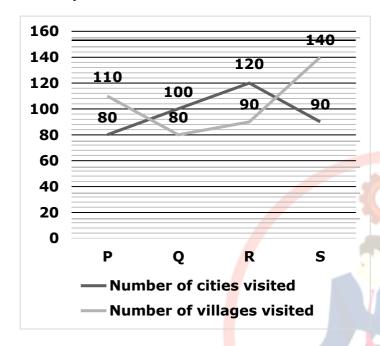
Required difference = 81 - 65 = 16

Line graph

Directions (6-10): Read the following information carefully and answer the questions given below.

The given line graph shows the number of cities visited by four different tourists namely P, Q, R

and S and also given the number of villages visited by these four tourists.



- 6) Find the sum of the total number of cities and villages visited by Tourist S and the number of villages visited by Tourist P.
- a) 340
- b) 280
- c) 300
- d) 360
- e) None of these

Answer: A

Required sum = 90 + 140 + 110 = 340

- 7) Find the average number of villages visited by all the four tourists together.
- a) 101
- b) 110

- c) 120
- d) 105
- e) None of these

Answer: D

Required average = (110 + 80 + 90 + 140)/4 = 420/4 = 105

- 8) Find the difference between the number of cities visited by Tourist R and S together and the number of villages visited by Tourist Q.
- a) 130
- b) 150
- c) 120
- d) 140
- e) None of these

Answer: A

Required difference = (120 + 90) - 80 = 210 - 80 = 130

- 9) Find the ratio of the number of cities visited by Tourist P to the number of villages visited by Tourist S.
- a) 5:2
- b) 4:7
- c) 5:3
- d) 4:3
- e) None of these

Answer: B

Required ratio = 80:140 = 4:7

- 10) The number of villages visited by Tourist R is
- what percentage more or less than the number of
- cities visited by Tourist Q?
- a) 20% more
- b) 10% less
- c) 12% more
- d) 15% less
- e) None of these
- **Answer: B**
- Required percentage = (100 90)/100 * 100 =
- 10% less
- **Simplification**
- 11. 111/3 + 15 *? = 189 32
- a) 8
- b) 10
- c) 12
- d) 6
- **e)** 5
- Answer: A

- ? = 8
- 12. (41-26)*225 = ?*25
- a) 140
- b)135

- c)150
- d) 165
- e)160
- Answer: B
- (41-26)*225 = ?*25
- 15 * 225 = ? * 25
- 135 = ?
- 13) 54 /3 *7² -?² =521
- a) 14
- b)16
- c)17
- d)18
- e)19
- Answer: E
- 54 /3 *72 -?2 =521
- $18*49 ?^2 = 521$
- $?^2 = 361$
- ? = 19
- $14)\sqrt{441 + 29 204/17} = ?$
- a) 38
- b)27
- c)36
- d)40
- e)42
- Answer: A
- $\sqrt{441 + 29 204} / 17 = ?$

$$21 + 29 - 12 = ?$$

$$? = 38$$

- a) 450
- b)500
- c)550
- d)400
- e)600

Answer: B

$$304 + 76 *2 + 44 = ?$$

$$? = 500$$

16. 60 *24+ ? = 42*45

- a)350
- b)380
- c)400
- d)420
- e)450

Answer: E

$$1440 + ? = 1890$$

$$? = 450$$

17. 76 *12 + 0.6 *325 = 1100 - ?

- a) -8
- b) -10
- c)-7
- d)-11
- e)-6

Answer: C

$$912 + 195 = 1100 - ?$$

- a) 18
- b) 20
- c) 15
- d) 25
- **e)** 30

Answer: D

$$7(9/13)*39 + 700 = ?*40$$

$$100/13*39+700 = ?*40$$

$$? = 25$$

19. (95/5) + 1331 /121 = ?

- a) 25
- b) 27

e) 20

Answer: C

$$(95/5) + 1331/121 = ?$$

$$19 + 11 = ?$$

$$? = 30$$

20.
$$\sqrt{72900} + 650/50 = 16^2 + ?$$

Answer: B

$$\sqrt{72900 + 650/50} = 16^2 + ?$$

$$270 + 13 = 256 + ?$$

$$? = 27$$

$$21.130 + 306 - 6 = ? -100$$

Answer: C

$$130 + 306 - 6 = ? -100$$

$$? = 530$$

22.6*45 - 100 + 30 = 625 - ?

Answer: A

$$6*45 - 100 + 30 = 625 - ?$$

$$200 = 625 - ?$$

$$? = 425$$

23. 14 * 8 + ? - 184/4 = 104

Answer: B

$$112 + ? - 46 = 104$$

$$? = 38$$

Answer: D

$$160 = 300 - ?$$

$$? = 140$$

25. 396 -15 *15 /? = 351

e) 12

Answer: A

? = 5

Find the missing number series

26. 21,32 , 49, 72, ?,136

- a) 91
- b) 95
- c) 111
- d) 101
- e) 108

Answer: d

Solution

$$21 + 11 = 32$$

49 + (17 +6) = 72

$$101 + (29 + 6) = 136$$

27. 10, ?,30, 66, 130, 230

a) 8

- b) 14
- c) 18
- d) 12
- **e)** 9

Answer: b

Solution

$$10 + 2^2 = 14$$

$$14 + 4^2 = 30$$

$$30 + 6^2 = 66$$

$$66 + 8^2 = 130$$

$$130 + 10^2 = 230$$

28. 6, 8, 18, 56, ?,1132

- a) 226
- b) 223

c) 230

- d) 420
- e) 325

Answer: A

Solution

$$6*1+2=8$$

$$8*2+2=18$$

$$18*3 + 2 = 56$$

29. 4160, 83, 112, ?,180

- a) 140
- b) 142
- c) 130
- d) 152
- e) 143

Answer: E

Solution

$$41 + 19 = 60$$

$$60 + 23 = 83$$

$$83 + 29 = 112$$

$$112 + 31 = 143$$

143 + 37 = 180

30. 24, ?,33.25,42.25,42.50,51.50

- a) 32
- b) 33
- c) 30
- d) 29

Answer: B

Solution

$$24 + 9 = 33$$

$$33 + 0.25 = 33.25$$

$$33.25 + 9 = 42.25$$

$$42.25 + 0.25 = 42.50$$

$$42.50 + 9 = 51.50$$

Mensuration

- 31) The perimeter of the square whose side is 'L + 5' m is equal to the circumference of the circle whose radius is 7m. Find the area of the square whose side is L m.
- a) 25 m²
- b) 121 m²
- c) 36 m²
- d) 49 m²
- e) None of these

Answer: C

Circumference of the circle = 2 * 22/7 * 7 = 44 m

$$4 * (L + 5) = 44$$

$$L + 5 = 11$$

$$L = 6 \text{ m}$$

Area of the square = $6 * 6 = 36 \text{ m}^2$

Time and speed

32) A man travels at a speed of 42 km/hr for 8 hours and at a speed of 32 km/hr for 2 hours. Find the average speed of man in his journey.

- a) 40 km/hr
- b) 30 km/hr
- c) 20 km/hr
- d) 28 km/hr
- e) None of these

Answer: A

Average speed = (42 * 8 + 32 * 2)/(8 + 2) = (336 + 64)/10 = 400/10 = 40 km/hr

SI and CI

33) Amir invested Rs.3680 in SI and obtained an interest of Rs.1840. Find the rate of interest at which Amir invested, if the rate of interest is twice the investment period.

- a) 14%
- b) 10%
- c) 12%
- d) 16%
- e) None of these

Answer: B

Let the investment period be x and rate of interest be 2x.

3680 * 2x * x/100 = 1840

 $x^2 = 25$

x = 5

Rate of interest at which Amir invested = 2 * 5 = 10%

Time and work

- 34) A and B together can complete 8/15th of the work in 5 days and B alone can complete the remaining work in 7 days. Find the time taken by A alone to complete the whole work.
- a) 25 days
- b) 20 days
- c) 18 days
- d) 15 days
- e) None of these

Answer: A

Time taken by A and B together to complete the whole work = 5 * 15/8 = 75/8 days

Remaining work completed by B = 1 - 8/15 = 7/15

Time taken by B alone to complete the whole work = 7 * 15/7 = 15 days

Time taken by A alone to complete the whole work = 8/75 - 1/15 = (8 - 5)/75 = 3/75 = 1/25 = 25 days

Mixture and allegation

35) A vessel contains 120 litres of mixture of juice and water in the 8:7. If 30 litres of mixture is taken out and 18 litres of water is added to the vessel,

then find the ratio of the final quantity of juice to water in the vessel.

- a) 5:3
- b) 3:2
- c) 4:3
- d) 4:5
- e) None of these

Answer: D

Initial quantity of juice = 120 * 8/15 = 64 litres

Initial quantity of water = 120 - 64 = 56 litres

Required ratio = (64 - 30 * 8/15): (56 - 30 * 7/15)

$$+ 18$$
) = $(64 - 16)$: $(56 - 14 + 18)$ = $48:60 = 4:5$

Ratio and proportion

36) A class consists of 68 students (athlete + cricketer + singer). Ratio of the number of athletes to cricketers is 2:9 and the number of singers is 8 more than that of cricketers. Find the

- a) 6
- b) 15
- c) 27
- d) 35
- e) None of these

Answer: C

Number of athletes in the class = 2x

number of cricketers in the class.

Number of cricketers in the class = 9x

Number of singers in the class = 9x + 8

$$2x + 9x + 9x + 8 = 68$$

$$20x + 8 = 68$$

$$20x = 60$$

$$x=3$$

Number of cricketers in the class = 9 * 3 = 27

Ages

37) A is 6 years elder than C and B is 6 years elder than A and the sum of the present ages of A, B and C is 72 years. Find the age of B after 6 years.

- a) 24 years
- b) 20 years
- c) 28 years
- d) 36 years
- e) None of these

Answer: D

Present age of A = A

Present age of B = A + 6

Present age of C = A - 6

$$A + A + 6 + A - 6 = 72$$

$$3A = 72$$

$$A = 24$$

Present age of B = 24 + 6 = 30 years

Age of B after 6 years = 30 + 6 = 36 years

Boats and stream

38) Sum of the downstream and upstream speed of the boat is 40 km/hr and the ratio of the

distance covered by the boat in downstream in 5 hours to upstream in 10 hours is 3:4. Find the speed of the stream.

- a) 4 km/hr
- b) 3 km/hr
- c) 6 km/hr
- d) 5 km/hr
- e) None of these

Answer: A

Speed of the boat in still water = $\frac{40}{2}$ = 20 km/hr

Let the speed of the stream be C km/hr

$$(20 + C) * 5/(20 - C) * 10 = 3/4$$

$$40 + 2C = 60 - 3C$$

$$5C = 20$$

C = 4 km/hr

Profit and Loss

39) A shopkeeper marked the price of an article

by x% and he offers a discount of 20% but still

obtained an profit of 12%. Find the value of x.

- a) 50
- b) 25
- c) 40
- d) 10
- e) None of these

Answer: C

Let the cost price of the article be Rs.a

$$a * (100 + x)/100 * 80/100 = a * 112/100$$

$$400 + 4x = 560$$

$$4x = 160$$

$$x = 40$$

Partnership

40) A, B and C entered into a partnership with an investment of Rs.4000, Rs.3500 and Rs.5000 respectively. If the total profit obtained by them at the end of one year is Rs.5000, then find the difference between the profit obtained by A and C.

- a) Rs.250
- b) Rs.400
- c) Rs.360
- d) Rs.450
- e) None of these

Answer: B

Profit ratio of A, B, and C = (4000 * 1) : (3500 * 1)

$$(5000 * 1) = 8:7:10$$

Required difference = 5000 * (10 - 8)/(8 + 7 + 10)

$$= 5000 * 2/25 = Rs.400$$



