

1. Sum of three even consecutive numbers is 48, which is the least number

- 1) 16
- 2) 18
- 3) 20
- 4) 14

Sol: Let the numbers be $2n$, $2n+2$ and $2n+4$

$$2n + (2n+2) + (2n+4) = 48$$

$$6n = 48 - 6 = 42, n = 7$$

Hence the numbers are $\rightarrow 14, 16$ and 18

The least number is 14 .

2. The L.C.M of two numbers is 2310 and their H.C.F is 30 . If one number is 210 the Other is
The other number

$$= \text{L.C.M} \times \text{H.C.F} / \text{given number}$$

$$= 2310 \times 30 / 210 = 330$$

15)

3. Five years ago the average age of a family of 3 members was 27 years. A child has Been born, dueto which the average age of the family is 25 years today. What is the Present age of the child?

Average age of the family of 3 members

$$5 \text{ years ago} = 27 \text{ years}$$

Sum of the ages of the 3 members now

$$= (27 + 5) \times 3 = 96 \text{ years}$$

Average age of the family of 4 members now

$$= 25 \text{ years}$$

Sum of the ages of the 4 numbers now

$$= 25 \times 4 = 100 \text{ years}$$

$$\text{Age of child} = 100 - 96 = 4 \text{ years}$$

4. A boy was asked to find the value of $3/8$ of a sum of money. Instead of multiplying The sum by $3/8$ he divided it by $3/8$ and then his answer exceeded by Rs. 55 . Find the Correct be x .

Sol: Let amount be x

$$8/3 \times x - 3/8 \times x = 55$$

$$\rightarrow 64x - 9x/24 = 55 \rightarrow 55x/24 = 55$$

$$\rightarrow x = 24 \times 55 / 55 = 24$$

$$\therefore 3/8 \text{ of } x = 3/8 \times 24 = \text{Rs.}9$$

5. In a boat 25 persons were sitting. Their average weight increased one kilogram when One man goes and a new man comes in. The weight of the new man is 70 kgs. Find the Weight of the man who is going.

Sol: Weight increased per person is 1 kg.

Total increase in weight = 25 kgs

Weight of new man is 70 kgs,

(Which means his weight is 25 kgs heavier)

The weight of the old man was $70 - 25 = 45$ kgs

6. M men agree to purchase a gift for Rs. D . If three men drop out how much more
Will each have to contribute towards the purchase of the gift

- a) $D/(M-3)$
- b) $MD/3$
- c) $M/(D-3)$
- d) $3D/(M^2-3M)$

Ans. D

7. In a class composed of x girls and y boys what part of the class is composed of girls

- a) $y/(x + y)$
- b) x/xy
- c) $x/(x + y)$
- d) y/xy

Ans.C

8. I drove 60 km at 30 kmph and then an additional 60 km at 50 kmph. Compute my average speed over my 120 km.

- (a) 40
- (b) $37 \frac{1}{2}$
- (c) $25 \frac{1}{2}$
- (d) 50

Ans.B

9. If the wheel of a bicycle makes 560 revolutions in travelling 1.1 km, what is its radius?

- (1) 31.25 cm
- (2) 37.75 cm
- (3) 35.15 cm
- (4) 11.25 cm

Correct Answer - (1)

10. A trader gets a profit of 25% on an article. If he buys the article at 10% lesser price and sells it for Rs. 2 less, he still gets 25% profit. Find the actual CP of the article.

Soln: 25% gain \Rightarrow $SP = 1.25CP$1.

Now, CP is 10% less \Rightarrow $0.9CP$ and SP is Rs. 2 less \Rightarrow $(SP-2)$.

Still, profit is 25% \Rightarrow $(SP-2)=1.25(0.9CP)$, where $SP = 1.25CP$ (From 1)

ø CP = Rs. 16.

11. Which word does NOT belong with the others?

- a. cornea
- b. retina
- c. pupil
- d. vision**

Q.) For Q12. and Q13. find the word that names a *necessary* part of the underlined word.

12. monopoly

- a. corrupt
- b. exclusive**
- c. rich
- d. gigantic

13. facsimile
a. picture
b. image
c. mimeograph
d. copier

14. OIL PAINTING : CANVAS ::
A. etching : acid
B. violin : bow
C. fresco : plaster
D. building : architecture
E. watercolor : brush

15. CHECKERS : CHESS ::
A. tennis : soccer
B. field hockey : ice hockey
C. basketball : gymnastics
D. hearts : bridge
E. square : diamond