

Arithmetic Questions For CAT

There are various topics under CAT Arithmetic Questions for example percentage, profit and loss, ratio, and proportion, simple interest and compound interest, etc. Following are some examples of CAT Arithmetic Questions that will give an idea to the candidates about the type of CAT Arithmetic Questions asked.

Question: Cost of 4 trousers and 3 shirts is Rs. 282. Cost price of the shirt is Rs. 4 less than the price of the trouser. What is the difference between the cost of 9 trousers and 7 shirts?

Answer: 112

Explanation: Let the cost price of trouser and shirt be Rs. T and Rs. S respectively.

$$4T + 3S = 282 \dots (1)$$

$$T = S + 4 \dots (2)$$

By solving equation (1) and (2):

$$S = 38, T = 42$$

$$\text{Required Difference} = 42 \times 9 - 38 \times 7 = 112$$

Question: A question paper consists of 50 question. Each correct answer fetches three marks and one mark is deducted for each wrong answer. A student who attempted all the questions scored 90 marks. Find the number of questions answered correctly by him.

Answer: 35

Explanation: Let the number of questions answered correctly be x.

Then, (50 - x) questions were answered wrong.

$$\text{Total marks scored by the student} = x \times 3 - (50 - x) \times 1 = 90$$

$$\Rightarrow x = 35.$$

Question: The ratio of male to female in a village is 5 : 4, and the difference between number of males and females is 336. Find the population of the village.

Answer: 3024

Explanation: Let the number of males and females in the village be 5x and 4x respectively.

$$\text{So, population of village} = 5x + 4x = 9x$$

$$\text{According to the question, } 5x - 4x = 336; x = 336$$

$$\text{Therefore, population of the village} = 9 \times 336 = 3024$$

Question: In how many years will the principal of Rs. 1000 will give an interest of Rs. 200 at an interest rate of 5%?

Answer: 4

Explanation: Principal = Rs. 1000

At 5% interest rate, interest per year = Rs. 50

Number of years required for Rs. 200 interest = $200 \div 50 = 4$

Question: Six years hence, the age of A would be $\frac{5}{6}$ th of the age of B. 4 years ago, the ages of A and B were in the ratio of 10: 13. What is the present age of C, who is 5 years elder to A?

Answer: 29 years

Explanation: Let the ages of A and b 6 years hence be $5x$ and $6x$ respectively.

According to the question, $\frac{5x-10}{6x-10} = \frac{10}{13}$

$$\Rightarrow \frac{x-2}{6x-10} = \frac{2}{13}$$

$$\Rightarrow 13x - 26 = 12x - 20$$

$$\Rightarrow x = 6$$

Present Age of C = $5x - 1 = 5 \times 6 - 1 = 29$ years