

Percentage Questions for CDS, CLAT and SSC Exams.

Percentage Quiz 2

Directions: Kindly study the following Questions carefully and choose the right answer:

1. Shobha's Mathematics test had 75 problems i.e. 10 arithmetic, 30 algebra and 35 geometry problems. Although she answered 70% of the arithmetic, 40% of the algebra and 60% of the geometry problems correctly, she did not pass the test because she got less than 60% of the problems right . How many more question she would have needed to answer correctly to earn a 60% passing grade?

A. 2	B. 4	C. 5	D. 7				
2. Fourty-five percent of a number is 30 less than three-fifth of that number. What is the number?							
A. 100	B. 120	C. 130	D. 200				
3. Mr. Keisham gave 40% of the money he had, to his wife. He also gave 20% of the remaining amount to each of his three sons, Half of the amount now left was spent on miscellaneous item and the remaining amount of Rs. 12,000 was deposited in the bank. How much money did Mr. Keisham have initially?							
A. 1,000	В. 10,000	C. 1,00,000	D. 10,00,000				
4. When the price of a product was decreased by 10%, then the number of sell increased by 30%. What was the effect on the total revenue?							
A. 5%	B. 10%	C. 12%	D. 17%				
5. If the numerator of a fraction be increased by 15% and its denominator be diminished by 8%, the value of the fraction is 15/16 . Find the original fraction.							
A. $\frac{1}{2}$	B. $\frac{3}{2}$	C. $\frac{3}{4}$	D. $\frac{4}{3}$				
6. The population of a town is 1,76,400. If it increase at the rate of 5% per annum, what will be its population 2 years hence? What was it 2 years ago?							
A. 1,94,481 and 1,60,000	B. 1,43,564 and 1,20,000						
C. 1,56,342 and 2,00,000	D. 3,22.968 and 3,40,000						

7. In the new budget, the price of refined oil rose by 25%. By how much percent must a person reduce his consumption so that his expenditure on it does not increase?							
A. 10%	B. 20%	C. 25%	D. 30%				
8. Deepika's salary wa percent does she lose	as decreased by 50% and ?	l subsequently increased	by 50%. How much				
A. 5%	B. 10%	C. 15%	D. 25%				
9. The monthly income of a person was reduced by 10%. By what percent should his reduced monthly income be raised so as to bring it at par with his original income?							
A. $2\frac{3}{4}\%$	B. $1\frac{3}{4}\%$	C. $11\frac{1}{9}\%$	D. $\frac{11}{9}\%$				
10. Virat spent 14% of the remaining amount	his income on electricity t is Rs. 5125. How much d	bills, 28% on rent and 18 id he spend on electricity	% on shopping. ¼ of v bill?				
A. 2490 and 4150	B. 2090 and 4150	C. 4537 and 7467	D. 4625 and 4537				
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Correct Answers:

1	2	3	4	5	6	7	8	9	10
C	D	С	D	С	А	В	D	С	Α

Explanations:

1. Number of questions attempted correctly = (70% of 10 + 40% of 30 + 60% of 35)

 $\Rightarrow (7 + 12 + 21) = 40.$

Questions to be answered correctly for 60% grade = 60% of 75 = 45.

So, Required number of questions = (45 - 40) = 5.

Hence, option (C) is correct.

2. Let the number be x.

Then, $\frac{3}{5}x - (45\% \text{ of } x) = 30$ $\Rightarrow \frac{3}{5}x - \frac{45}{100}x = 30.$ $\Rightarrow 15x = 3000 \Rightarrow x = 200.$ Hence, option (D) is correct.

3. Let the initial amount with Mr. Keisham be Rs. x. Then, $\frac{1}{2}[100 - (3 \times 20)]\%$ of (100 - 40)% of x = 12000. $\Rightarrow \frac{1}{2} \times \frac{40}{100} \times \frac{60}{100} \times x = 12000 \iff \frac{3}{25}x = 12000.$ $\Rightarrow x = (\frac{12000 \times 25}{3}) = 100000.$ Hence, option (C) is correct.

4. To solve this question, we can apply a short trick approach;

Net% effect = $(x + y + \frac{xy}{100})$ %. Increase or decrease, according to the +ve or –ve sign respectively. Given; Price Increased = x = 30% Price Decreased = y = -10% By the short trick approach, we get

$$= \left(30 - 10 - \frac{30 \times 10}{100}\right) = 17\%.$$

Hence, option (D) is correct.

5. Let the original fraction be $\frac{x}{y}$. Then, $\frac{115\% \text{ of } x}{92\% \text{ of } y} = \frac{15}{16} \Rightarrow \frac{115x}{92y} = \frac{15}{16}$ $\Rightarrow \frac{x}{y} = \left(\frac{15}{16} \times \frac{92}{115}\right) = \frac{3}{4}.$ Hence, option (C) is correct. 6. Population after 2 years = $176400 \times (1 + \frac{5}{100})^2$ ⇒ $(176400 \times \frac{21}{20} \times \frac{21}{20}) = 194481.$ Population 2 years ago = $\frac{176400}{\left(1 + \frac{5}{100}\right)^2}$ $\Rightarrow (176400 \times \frac{20}{21} \times \frac{20}{21}) = 160000.$ Hence, option (A) is correct. 7. Where $R \Rightarrow$ the rose price of refined oil = 25% Reduction in consumption = $\left[\frac{R}{(100 + R)} \times 100\right]$ %.

$$\Rightarrow \left(\frac{25}{125} \times 100\right)\% = 20\%$$

Hence, option (B) is correct.

8. To solve this question, we can apply a short trick approach;

Net% effect = $(x + y + \frac{xy}{100})$ %. Increase or decrease, according to the +ve or –ve sign respectively. Given; Increased Number = x = 50% Decreased Number = y = -50% Puthe short trick approach, we get

By the short trick approach, we get

$$= \left(50 - 50 - \frac{50 \times 50}{100}\right) = -25\%.$$

Hence, option (D) is correct.

9. Let the original monthly income be Rs. 100, New income = Rs. 90. Increase on 90 (new income) = 10.Then,

Increase on
$$100 = \left(\frac{10}{90} \times 100\right)\% = 11\frac{1}{9}\%.$$

Hence, option (C) is correct.

10. Let the number be x and y. then, 7.5% of x = 12.5% of y $\Rightarrow x = \frac{125}{75}y \Rightarrow \frac{5}{3}y.$ Now, $x - y = 1660 \Rightarrow \frac{5}{3}y - y = 1660 \Rightarrow \frac{2}{3}y = 1660.$ $\Rightarrow y = (\frac{1660 \times 3}{2}) = 2490.$ So, One number = 2490, Second number = $\frac{5}{3}y = 4150.$ Hence, option (A) is correct.

