

# Percentages - Solved Examples

**Q 1 - What is fraction equivalent of 32%.**

A - 6/30

B - 8/25

C - 7/50

D - 11:10

**Answer - B**

**Explanation**

$$32\% = 32/100 = 8/25.$$

**Q 2 - What is fraction equivalent of 160%.**

A - 8/5

B - 9/5

C - 6/7

D - 6/23

**Answer - A**

**Explanation**

$$160\% = 160/100 = 8/5$$

**Q 3 - What is decimal equivalent of 0.8%.**

A - 0.008

B - 0.08

C - 0.8

D - 0.0008

**Answer - A****Explanation**

$$0.8\% = 0.8/100 = 0.008.$$

**Q 4 - What is decimal equivalent of 18%.**

A - 0.0018

B - 0.18

C - 18

D - 0.018

**Answer - B****Explanation**

$$18\% = 18/100 = 0.18$$

**Q 5 - What is decimal equivalent of 5%.**

A - 0.0005

B - 0.005

C - 0.05

D - 0.5

**Answer - C**

**Explanation**

$$5\% = 5/100 = 0.05$$

**Q 6 - What is decimal equivalent of 126%.**

A - 1.26

B - 126

C - 12.6

D - 1260

**Answer - A**

**Explanation**

$$126\% = 126/100 = 1.26$$

**Q 7 - What is decimal equivalent of 0.06%.**

A - 0.6

B - 0.06

C - 0.006

D - 0.0006

**Answer - D**

**Explanation**

$$0.06\% = 0.06/100 = 0.0006.$$

**Q 8 - What is 3/4 as per cent?**

A - 45

B - 55

C - 65

D - 75

**Answer - D**

**Explanation**

$$3/4 = (3/4 \times 100)\% = 75\%$$

**Q 9 - 45% of 280 + 28% of 450 = ?.**

A - 352

B - 252

C - 452

D - 552

**Answer - B**

**Explanation**

$$\begin{aligned} 45\% \text{ of } 280 + 28\% \text{ of } 450 &= (450/100 \times 280) + (28/100 \times 450) \\ &= (126 + 126) = 252 \end{aligned}$$

**Q 10 - Which is largest in 50/3%, 2/15, 0.18, 3/7 ?**

A - 0.18

B - 3/7

C - 2/15

D - 50/3%

**Answer - B**

**Explanation**

$$\begin{aligned} 50/3\% &= 50/(3 \times 100) = 1/6 = 0.166, \quad 2/15 = 0.133, \quad 3^{\text{rd}} \text{ number} = 0.18, \quad 3/7 = 0.42. \\ \text{Clearly, } 3/7 &\text{ is largest.} \end{aligned}$$

**Q 11 - 65% of a number is 21 less than 4/5 th of that number. Find the number.**

A - 140

B - 130

C - 120

D - 110

**Answer - A**

**Explanation**

Let the number be x. Then,  
 $(\frac{4}{5}x) - (65\% \text{ of } x) = 21 \Rightarrow \frac{4x}{5} - \frac{65x}{100} = 21 \Rightarrow \frac{4x}{5} - \frac{13x}{20} = 21$   
 $\Rightarrow 16x - 13x = 420 \Rightarrow 3x = 420 \Rightarrow x = 140.$   
Required number = 140.

**Q 12 - What per cent is 120 of 90?**

A - 400/3%

B - 400/6%

C - 200/3%

D - 200/6%

**Answer - A**

**Explanation**

Required % =  $(\frac{120}{90} \times 100)\% = 400/3\%$

**Q 13 - What percent is 5gm of 1kg?**

A - 0.15%

B - 0.05%

C - 0.25%

D - 0.35%

**Answer - B**

**Explanation**

$$\text{Required \%} = (5/1000 \times 100)\% = 1/2\% = 0.05\%$$

**Q 14 - What per cent is 120 ml of 3.5 liters?**

A - 30/7%

B - 20/7%

C - 10/7%

D - 1/7%

**Answer - A**

**Explanation**

$$\text{Required \%} = (150/3500 \times 100)\% = 30/7\%$$

**Q 15 - If A's pay is 20% more than that of B, then what number of per penny is B's compensation not as much as that of A?**

A - 50/3%

B - 60/3%

C - 70/3%

D - 80/3%

**Answer - A**

**Explanation**

B's salary is less than that of A by  $\{R/((100+R)) \times 100\}\%$   
 $= \{20/((120)) \times 100\}\% = 50/3\%$

**Q 16 - If A's salary is 25% not as much as that of B, then what number of per penny is B's compensation more than that of A?**

A - 10/3%

B - 100/3%

C - 20/3 %

D - 200/3 %

**Answer - B**

**Explanation**

B's salary is more than that of A by  $\{R/((100-R)) \times 100\}\%$   
 $= \{25/((100-25)) \times 100\}\% = (25/75 \times 100) = 100/3\%$

**Q 17 - If the cost of tea is expanded by 20%, by what amount of percent must the utilization of tea be lessened so as not to build the consumption?**



A - 50/3%

B - 100/3%

C - 20/3%

D - 200/3%

**Answer - A**

**Explanation**

$$\begin{aligned}\text{Reduction \% in consumption} &= \{R/((100+R)) * 100\} \% (20/120 * 100) \% \\ &= 50/3\%\end{aligned}$$

**Q 18 - If the cost of sugar falls by 10%, by how much per penny should a householder expand its utilization, so as not to diminish its use on sugar?**

A - 100/9

B - 10/9

C - 100/3

D - 10/3

**Answer - A**

**Explanation**

$$\text{Increase \% in consumption} = \{R/((100-R)) * 100\} \% = \{10/((100-10)) * 100\} = 100/9\%$$

**Q 19 - The tax on a commodity is diminished by 20% and its consumption increases by 15%. Find the effect on revenue.**

A - 8% increase

B - 8% decrease

C - 10% decrease

D - 10% increase

**Answer - B**

**Explanation**

Let originally revenue obtained by Rs.  $x$ .

New revenue = (Consumption \* Tax)

= (115% of 80% of Rs.  $x$ ) = Rs( $115/100 * 80/100 * x$ ) = Rs.  $92x/100$

= 92% of the original.

Hence, the revenue is decreased by 8%.

**Q 20 - The population of a town is 176400. It increases annually at the rate of 5% p.a. What will be its population after 2 years?**

A - 194481

B - 294481

C - 394481

D - 494481

**Answer - A**

**Explanation**

Population after 2 years =  $\{176400 * (1+5/100)^2\}$   
 $176400 * 21/20 * 21/20 = 194481.$