

Fractions and Percentages

1. What is $\frac{2}{8}$ as a percentage?

Answer: $\frac{2}{8} = \frac{?}{100}$

$$2 \times 100 = 8 \times ?$$

$$? = \frac{(2 \times 100)}{8} = 25$$

Thus, 25%

2. Write 40% as a fraction.

Answer: $40\% = \frac{40}{100} = \frac{2}{5}$ (divide the numerator and the denominator by 20).

3. Convert $\frac{1}{8}$ into a percentage.

Answer: $\frac{1}{8} = \frac{?}{100}$

$$1 \times 100 = 8 \times ?$$

$$? = \frac{100}{8} = 12.5$$

Thus, 12.5%

4. $\frac{21}{28}$ as a percentage is

- a) 25%
- b) 60%
- c) 75%

Answer: (c) because $\frac{21}{28} = \frac{3}{4}$ (divide the numerator and the denominator by 7) and $\frac{3}{4}$ is 75%.

5. 60% as a fraction is

- a) $\frac{2}{3}$
- b) $\frac{3}{5}$
- c) $\frac{13}{20}$

Answer: (b) because $60\% = \frac{60}{100} = \frac{3}{5}$ (divide the numerator and the denominator by 20).

6. A pizza has 8 pies. Raj eats 25% of it. How many pies does he eat?

Answer: $25\% = \frac{1}{4}$. Hence $\frac{1}{4}$ of 8 = $\frac{1}{4} \times 8 = 2$. Raj eats 2 pies.

7. Convert 15% into a fraction.

Answer: $15\% = \frac{15}{100} = \frac{3}{20}$ (divide the numerator and the denominator by 5).

8. There are 20 pencils in a box. 7 of them are blue and the rest of them are black. What is the percentage of black pencils?

Fractions and Percentages

Answer: 7 are blue, so $20 - 7 = 13$ are black.

$$\frac{13}{20} = \frac{?}{100}$$

$$13 \times 100 = ? \times 20$$

$$? = \frac{(13 \times 100)}{20} = 65.$$

Thus, 65% pencils are black.

9. Is $\frac{6}{24}$ equal to 25%?

Answer: Yes, because $\frac{6}{24} = \frac{1}{4}$ and $\frac{1}{4}$ is 25%.

10. Is 30% equal to $\frac{10}{30}$?

Answer: No, because $30\% = \frac{30}{100}$ and the cross product of $\frac{30}{100}$ and $\frac{10}{30}$ is not equal.

$$30 \times 30 = 900 \text{ is not equal to } 100 \times 10 = 1000.$$

How did you do? If you didn't do well, watch the following videos and try again!

- [Percentages as Fractions](#)
- [Fractions as Percentages](#)
- [Mental Math - Percentages](#)