

What is 45% written as a decimal and fraction in simplest form?

$$0.45 \quad \frac{45}{100} = \frac{9}{20}$$

What is $0.\overset{6}{\underset{0}{6}}$ written as a percent?

$$60\%$$

What is $\frac{1}{3}$ as a percent?

$$\frac{1}{3} \cdot \frac{100}{1} = \frac{100}{3}$$

$$\begin{array}{r} 33\frac{1}{3}\% \\ 3 \overline{) 100} \\ \underline{-90} \\ 10 \\ \underline{-9} \\ 1 \end{array}$$

$$\frac{1}{2}$$

$$\frac{0.5 \times 100 = 50}{2 \overline{) 1.0} \\ \underline{-10} \\ 0 \\ \text{P}}$$

$$\begin{array}{r} 11 \overline{) 300} \\ \underline{-22} \\ 80 \\ \underline{-77} \\ 3 \end{array}$$

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Finding percents \times of numbers

a. What is 45% \times of 70?

$$X = 0.45 \cdot 70$$

$$\begin{array}{r} 0.45 \\ \times 70 \\ \hline 31.50 \end{array}$$

$$\boxed{X = 31.50}$$

b. What is 12% of 650?

$$X = \frac{12}{100} \cdot \frac{650}{1}$$

$$X = \frac{3}{25} \cdot \frac{650}{1}$$

$$X = 78$$

$$\begin{array}{r} 650 \\ \times .12 \\ \hline \end{array}$$

Find 62.5% of 800

$$X = 0.625 \cdot 800$$
$$\begin{array}{r} 0.625 \\ \times 800 \\ \hline 500000 \\ X = 500 \end{array}$$

Find 120% of 15

$$X = \frac{120}{100} \cdot 15$$
$$X = \frac{6}{5} \cdot 3 = 18$$
$$X = 18$$

One hundred twenty students are in the musical. If 30% of these students are boys, how many of the students in the musical are boys?

What is 30% of 120

$$X = 0.3 \cdot 120$$

$$X = 36$$

$$\begin{array}{r} 120 \\ \times 0.3 \\ \hline 360 \end{array}$$

There are 36 boys.

Camille made a total of 48 vanilla and chocolate cupcakes for her birthday. If 62.5% of the cupcakes are vanilla, how many cupcakes

Finding Percents of a Number Mentally

a. What is 1% of 300?

$$1\% \text{ of } 100 = 1$$
$$1\% \text{ of } 300 = \boxed{3}$$

c. What is 20% of 300?

$$10\% \text{ of } 300 = 30$$
$$20\% \text{ of } 300 = 60$$

e. What is 99% of 300?

b. What is 10% of 300?

$$\boxed{30}$$

d. What is 21% of 300?

$$20\% \text{ of } 300 = 60$$
$$1\% \text{ of } 300 = 3$$
$$21\% \text{ of } 300 = \boxed{63}$$

f. What is 15% of 60?

g. What is 10% of 80?

Classwork/Homework: 307/ 4-23, 39, 48 - 51, 70 - 78