

6.4a The Percent Equation

* is means equals
of means multiply

Ex. 1 What number is 24% of 50?

$a = 0.24 \cdot 50$
 $a = 0.24 \cdot 50$
 $a = 12$

$a = \frac{24}{100} \cdot 50$
 $a = \frac{1200}{100}$
 $a = 12$

$a = \frac{24}{100} \cdot 50$
 $a = \frac{24 \cdot 50}{100}$
 $a = \frac{1200}{100}$
 $a = 12$

Same answer → $a = 12$

Ex. 2 9.5 is what percent of 25?

$9.5 = p \cdot 25$
 $\frac{9.5}{25} = \frac{p \cdot 25}{25}$
 $\frac{9.5}{25} = p$
 $\frac{19}{50} = p$

$9.5 = p \cdot 25$
 $\frac{9.5}{25} = \frac{p \cdot 25}{25}$
 $0.38 = p$

$25 \overline{) 9.5}^8$
 $\underline{- 75}$
 200
 $\underline{- 200}$
 0

Ex. 3 39 is 52% of what number?

$39 = 0.52 \cdot n$
 $\frac{39}{0.52} = \frac{0.52 \cdot n}{0.52}$
 $\frac{39}{0.52} = n$

$39 = 0.52 \cdot n$
 $\frac{39}{0.52} = \frac{0.52 \cdot n}{0.52}$
 $75 = n$

$52 \overline{) 3900}^7.5$
 $\underline{- 3640}$
 260
 $\underline{- 260}$
 0

$39 = \frac{52}{100} \cdot n$
 $\frac{39 \cdot 100}{52} = \frac{52 \cdot n}{52}$
 $75 = n$

Same answer → $75 = n$