Find a Percent of a Number

Finding a percent of a number involves multiplication and division.

Find 3% of 45.

Different Ways to Find a Percent of a Number

**Way 1:** You can use a decimal equation.

**Step 1:** Write a proportion. Compare the part to the whole.

\[ 3\% = \frac{3}{100} \text{ parts to } 100 = \frac{3}{100}. \]

100 is the whole. The part is 3.

\[ \frac{3}{100} = \frac{n}{45} \]

45 is the whole. The part is \( n \).

**Step 2:** Use cross multiplying to solve for \( n \).

\[
\begin{align*}
\frac{3}{100} &= \frac{n}{45} \\
3 \times 45 &= 100 \times n \\
135 &= 100 \times n \\
135 &= (100 \times n) \\
100 &= \frac{135}{100} \\
1.35 &= n
\end{align*}
\]

**Way 2:** You can use a decimal equation.

**Step 1:** Translate words into symbols. Translate percent into decimals.

\[ \frac{3\%}{45} = \frac{n}{45} \]

\[ 0.03 \times 45 = n \]

**Step 2:** Multiply to solve for \( n \).

\[ n = 1.35 \]

Use a proportion to find the percent of each number.

1. 60% of 280  
2. 12% of 52  
3. 62% of 36  
4. 18% of 127  
5. 35% of 62  
6. 90% of 34  
7. 11% of 120  
8. 3\frac{1}{2}\% of 40

Use an equation to find the percent of each number.

9. 22% of 58  
10. 43% of 78  
11. 10% of 1,289  
12. 20% of 23  
13. 5% of 125  
14. 27% of 3  
15. 37.5% of 64  
16. 2\frac{1}{2}\% of 48  

Use with text pages 462–463.