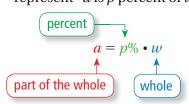
REVIEW: The Percent Equation

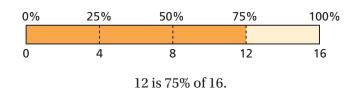
Key Concept and Vocabulary

You can use an equation to represent "a is p percent of w."





Visual Model



Skill Examples

1. 12 is what percent of 80?

$$12 = p\% \cdot 80$$

$$\frac{12}{80} = \frac{p\% \cdot 80}{80}$$

$$0.15 = p\%$$

- So, 12 is 15% of 80.
- **2.** What number is 45% of 40?

$$a = \frac{45}{100} \cdot 40$$

$$a = 18$$

So, 18 is 45% of 40.

Application Example

3. You earn 34 points on a test, which is 85% of the total points. How many points is the test worth?

$$34 = 0.85 \cdot w$$

$$\frac{34}{0.85} = \frac{0.85 \cdot w}{0.85}$$

$$40 = w$$

The test is worth 40 points.

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Check your answers at BigIdeasMath.com. —

Write and solve an equation to answer the question.

- 4. 18 is what percent of 90?
 - _____
- **6.** What number is 42% of 50?
- **8.** 180 is 75% of what number?

- **5.** 66 is what percent of 120?
- **7.** 34 is 40% of what number?
- **9.** 55 is what percent of 125?
- **10. BASEBALL** Of the 25 players on a baseball team, 12 are pitchers. What percent of the players are pitchers?
- **11. SURVEY** Students are asked whether they prefer math or science. Of the 120 students surveyed, 65% prefer math. How many of the students prefer science?