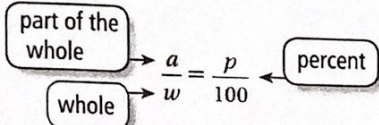


REVIEW: The Percent Proportion

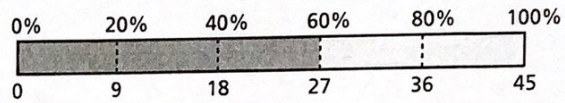
Name _____

Key Concept and Vocabulary

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



Visual Model



27 is 60% of 45.

Skill Examples

1. $\frac{36}{50} = \frac{p}{100}$

$100 \cdot \frac{36}{50} = 100 \cdot \frac{p}{100}$

$72 = p$

∴ So, 36 is 72% of 50.

2. $\frac{a}{36} = \frac{20}{100}$

$36 \cdot \frac{a}{36} = 36 \cdot \frac{20}{100}$

$a = 7.2$

∴ So, 7.2 is 20% of 36.

$\frac{\text{is}}{\text{of}} = \frac{\%}{100}$

Application Example

3. A basketball player makes 45%, or 9 shots, of her attempted shots. How many shots did the basketball player attempt?

$\frac{9}{w} = \frac{45}{100}$

$9 \cdot 100 = w \cdot 45$

$900 = 45w$

$\frac{900}{45} = \frac{45w}{45}$

$20 = w$

- ∴ The basketball player attempted 20 shots.



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Check your answers at BigIdeasMath.com.

Write and solve a proportion to answer the question.

4. 68 is what percent of 80?

85% $\frac{68}{80} = \frac{x}{100}$

5. What number is 25% of 116?

29 $\frac{x}{116} = \frac{25}{100}$

6. 36 is 16% of what number?

225 $\frac{36}{x} = \frac{16}{100}$

7. 48 is what percent of 128?

37.5 $\frac{48}{128} = \frac{x}{100}$

8. What number is 64% of 40?

25.6 $\frac{x}{40} = \frac{64}{100}$

9. 77 is 55% of what number?

140 $\frac{77}{x} = \frac{55}{100}$

10. **PLAY** Students are auditioning for a play. Of the 60 students auditioning, 12 will get a part in the play. What percent of the students who audition will get a part in the play?

20% $\frac{12}{60} = \frac{x}{100}$

11. **HOMEWORK** You have completed 60% of your English homework. The assignment has 25 questions. How many questions are left?

15 $\frac{x}{25} = \frac{60}{100}$