REVIEW: Percents:
Finding the Whole

Key Concept and Vocabulary

60% of 45 is 27.

$$\frac{3}{5} \times 45 = 27$$

$$27 \div \frac{3}{5} = 45$$

Write the percent as a fraction. Then divide the part by the fraction.

Finding a Whole

Visual Model

0%	20%	40%	60%	80%	100%
0	9	18	27	36	45
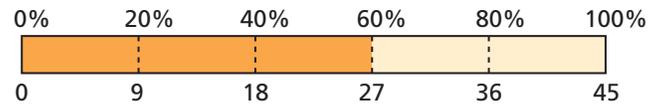
27 is 60% of 45.

Skill Examples

1. 30% of what number is 15?

$$15 \div 30\% = 15 \div \frac{3}{10}$$

$$= 15 \times \frac{10}{3} = 50$$

2. 110% of what number is 88?

$$88 \div 110\% = 88 \div \frac{11}{10}$$

$$= 88 \times \frac{10}{11} = 80$$

Application Example

3. A basketball player made 9 shots, which were 45% of her attempted shots. How many shots did the basketball player attempt?

$$9 \div 45\% = 9 \div \frac{9}{20}$$

$$= 9 \times \frac{20}{9}$$

$$= 20$$

⋮ The basketball player attempted 20 shots.

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Check your answers at BigIdeasMath.com.

Find the whole.

4. 25% of what number is 29? ___116___

5. 85% of what number is 68? ___80___

6. 16% of what number is 36? ___225___

7. 55% of what number is 77? ___140___

8. 4% of what number is 40? ___1000___

9. 155% of what number is 403? ___260___

10. PLAY Of the students who auditioned for a play, 20% got a part. There are 12 students in the play. How many students auditioned for a part in the play? ___60___

11. HOMEWORK You have completed 15 questions of your English homework, which is 60%. How many English questions were assigned for homework? ___25___