Name: _____

3-3 Additional Practice

Leveled Practice In **1–2**, fill in the boxes to solve.

1. A school drama club has 40 members. Of those students, 35% of the members are seventh graders. How many drama club members are seventh graders?

part = percent • whole

$n = \boxed{}\% \cdot \boxed{}$

$n = \boxed{}$

There are $\boxed{}$ seventh graders in the drama club.

2. Greta made 36 out of 60 free throws during a basketball season. What percent of free throws did Greta make?

part = percent • whole

$\boxed{} = p \cdot \boxed{}$

$\dfrac{\boxed{}}{\boxed{}} = \dfrac{p \cdot \boxed{}}{\boxed{}}$

$p = \boxed{}$, or $\boxed{}$%

Greta made $\boxed{}$% of her free throws.

3. A sweater normally costs $35. There is a 25% discount. What is the amount of discount and sale price of the sweater?

4. Find the percent.

132 is what percent of 880?

5. Decide whether the following situation is looking for the part, the percent, or the whole.

81 of 270 pages in a book

6. Dan is watching the birds in his backyard. Of the birds he watches, 9 of them, or 45%, are sparrows. How may birds are in his backyard?

7. The local movie theater decides to raise the ticket prices 25%. The original ticket price was $12.

a. Which percent equation can be used to determine the amount by which the ticket price will increase?

Ⓐ $y = 12 \div 25\%$

Ⓑ $y = 25\% \cdot 12$

Ⓒ $y = 25\% \div 12$

Ⓓ $y = 12 + 25\%$

b. How much will the price of tickets increase? What will be the new ticket price?

8. Ms. Morgan is a science teacher. She found that 30% of her 120 students are athletes. Mr. Gregory is a math teacher. He found that 27, or 15%, of his students are athletes.

 a. Of the part, the whole, and the percent, which information is still unknown to Ms. Morgan? Find this unknown value.

 b. Of the part, the whole, and the percent, which information is still unknown to Mr. Gregory? Find this unknown value.

9. On election day, registered voters go to a polling place to cast their vote.

 a. In a town, 273,600 votes were cast in an election. 57% of those who were registered voted. How many registered voters are there in the town?

 b. Reese claims that if 60% of the registered voters cast 273,600 votes, there would be fewer registered voters than above. Is he correct? Why or why not?

10. A student answers 90% of the questions on a math exam correctly. If he answers 27 questions correctly, how many questions are on the exam?

11. Higher Order Thinking Kristen is promoting an upcoming play. She has two options for how she will be paid. Option A is an hourly wage of $7.00. Option B is a 5% commission on all money made during the play. She plans to work 2 days for 8 hours each day. How much money will the play need to bring in for both payment options to be equivalent?

Assessment Practice

12. A photocopier is making reduced copies of a photo that measures 25 centimeters in height. The height of the first copy is 80% of the height of the original. Another copy is made using the first copy, and the height of this copy is 85% of the height of the first copy.

PART A

What is the height of the photo in the first copy? Explain your answer.

PART B

What is the height of the photo in the second copy? Explain your answer.