

NAME \_\_\_\_\_

Module 7    Ratio, Proportion, and Percent  
Lesson 5    Percent Proportions



Set 1

1 Show two different ways to estimate 72% of 300.

2 To estimate 22% of 480, Jill found 20% of 480, or 96. Katy found  $\frac{1}{4}$  of 480, or 120. Which estimate is closer to the actual answer? Explain.

Set 2

1 Taylor found that 10% of 4,280 is 428. How can Taylor use this fact to find 40% of 4,280? Explain.

2 Helen found that 10% of \$90 is \$9. How can Helen use this fact to calculate a 15% tip?

## Possible Answers

### Set 1

1. One way is to round 72% to 70%. Seventy percent of 300 is 210. Another way is to round 72% to 75% and use the fraction equivalent of  $\frac{3}{4}$ .

$$300 \times \frac{3}{4} = 225$$

2. Jill rounded 22% to 20%. Katy rounded it to  $\frac{1}{4}$ , which is 25%. Jill's estimate is closer to the actual answer because 22% is closer to 20% than to 25%.

### Set 2

1. Forty percent is equal to four times 10%. Taylor can take the number she found for 10% and multiply it by four. Forty percent of 4,280 is  $4 \times 428$ , or 1,712.
2. Fifteen percent of a number is the sum of 10% of the number and 5% of the number. Also, 5% is half of 10%. Ten percent of \$90 is \$9, so 5% is half of that: \$4.50. The tip is the sum: \$9.00 + \$4.50, or \$13.50.