Module 5   **Decimal Operations, Exponents, and Powers**
Lesson 5   **Dividing Decimals**

Challenge Problems

5.5

Set 1

1 Explain how you could use money to model $3.75 \div 0.3$.

2 For what value of b is the equation $b \div 0.4 = 8$ true? Explain your answer.

Possible Answers

Set 1

1. **Model $3.75 using 37 dimes and one nickel. Then, make groups of three dimes. These groups show the number of groups of 30¢. There are 12 groups, with one dime and one nickel left over. One dime and one nickel is one-half of thirty cents. There are 12.5 groups. $3.75 ÷ 0.3 = 12.5**

2. **The quotient times the divisor is equal to the dividend. In the division problem $b \div 0.4 = 8$, b is the dividend, eight is the quotient, and 0.4 is the divisor. So, $b = 8 \times 0.4$, or 3.2.**