



CHAPTER
9

Multiplying and Dividing Decimals

**PROBLEM SOLVING**

Thinking Skills

Solve.

1. Compare the value of 2.134×6 rounded to the nearest hundredth and 12.65. Which is greater?

2. Compare the value of $22.134 \div 6$ rounded to the nearest tenth and 3.9. Which is less?

3. Compare the best estimate for $1.789 \div 178$ and 0.05. Which is less?

Name: _____

Date: _____

Solve. Show your work.

4. A ball of fine thread cost \$1.65 per meter for the first 20 meters and \$0.95 for each additional meter. Jesse bought 32 meters of the thread. How much did she pay for the thread?

5. The mass of a bag of sand was 2.95 kilograms when it was two-thirds full. When $\frac{1}{6}$ of the sand was removed, the mass of the bag of sand became 2.325 kilograms. Find the mass of the empty bag in kilograms.

Name: _____

Date: _____

6. Diana paid \$35 for 10 kilograms of raisins. She put half of the total mass of the raisins into Pack A and the other half into Pack B. Diana sold Pack A for \$4.50 per kilogram and Pack B for \$5.50 per kilogram. Diana sold all of the raisins. How much money did she make?
7. Kelly bought 2 kilograms of rice and $\frac{1}{2}$ kilogram of meat from the supermarket. The cost of 5 kilograms of rice was \$13. She spent \$9.80 in all. How much did 1 kilogram of meat cost?

**PROBLEM SOLVING****Strategies****Solve. Show your work.**

8. An antique clock takes 5.5 seconds to chime 3 times at 3 o'clock. How long does it take for the clock to chime at 9 o'clock?
9. After Jonathan spent $\frac{1}{4}$ of his savings and Connor doubled his own savings, they both had the same amount of money. The amount of money Jonathan spent was \$53.60. How much savings did Connor have at first?

Name: _____

Date: _____

- 10.** Evelyn went shopping with half of her monthly allowance. She spent \$39.95 on a dress and $\frac{3}{7}$ of the remainder on some accessories. Evelyn had \$30.60 left after shopping. What is Evelyn's monthly allowance?
- 11.** After chopping down a huge tree, a wood cutter sawed the tree trunk in half. He then sawed each half into quarters. Each quarter was then sawed into halves again. Those small pieces of wood were 1.36 meters long. Find the original length of the tree trunk to the nearest tenth of a meter.

Name: _____

Date: _____

12. Darren bought a toy. He sold the toy to Peter for $\frac{5}{4}$ the price he paid for it. Peter then sold the toy to Allen for $\frac{2}{5}$ less than what he paid for it. Allen paid \$12.45 for the toy. How much did Darren pay for the toy?

13. Caroline has just enough money to buy either 6 pears and 20 oranges, or 12 oranges and 11 pears. Each pear costs \$0.80. How much does an orange cost?

Name: _____

Date: _____



PROBLEM SOLVING

Exploration

Solve.

- 14.** Write the following in five different ways.

$$7 \times 0.3$$

- 15.** Write the decimal 2.048 in at least ten different ways.

Name: _____

Date: _____

Solve. Show your work.

16. List the steps you use to find the products:

a. 0.55×40

Step 1

Step 2

Step 3

b. $0.217 \times 3,000$

Step 1

Step 2

Step 3

Name: _____

Date: _____



Journal Writing

Divide.

17. $2 \div 0.78$

Hint: Think of tenths and hundredths.

Divide. Round the quotient to the nearest thousandth.

18. $\frac{6.15}{4}$