

Name _____

1. James bought 10 pencils from the school store and paid a total of \$1.30. How much did each pencil cost? Write an equation to show your work. Explain how the decimal point moves. **3 points**

Each pencil cost \$0.13.
 $\$1.30 \div 10 = \$0.13.$
The decimal point moves 1 place to the left.

2. Over the course of 6 days, Tonda ran 17.22 miles. She ran the same distance each day. How far did Tonda run each day? Write an equation to show your work. **2 points**

2.87 miles;
 $17.22 \div 6 = 2.87$

3. Choose the correct quotient for each expression. Use number sense and estimation to help. **1 point**

	79.4	21	8.58	91.6
$50.4 \div 2.4$	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
$77.86 \div 0.85$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
$95.28 \div 1.2$	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
$81.51 \div 9.5$	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

4. What is the value of the missing exponent in the equation $720 \div 10^{\square} = 0.720$? **1 point**

- (A) 1 (C) 3
(B) 2 (D) 4

5. A panel in one of the hallways of Emilio's school is rectangular with an area of 44.52 square feet. If the panel is 21 feet long, how wide is it? **1 point**

- (A) 0.212 feet (C) 2.12 feet
(B) 1.12 feet (D) 21.2 feet

6. A soccer team spent \$216 on 15 new soccer balls. Each ball cost the same.

- A. Estimate the cost of each soccer ball. Write an equation to show your work. **2 points**

Sample answer: \$15;
 $225 \div 15 = 15$

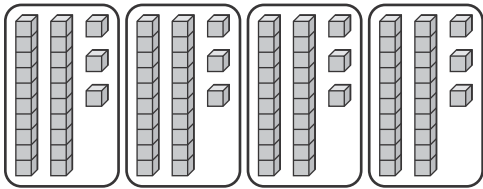
- B. Find the exact cost of each soccer ball. Compare your answer to your estimate to check for reasonableness. **2 points**

\$14.40; Sample explanation: My answer is close to my estimate, so my answer is reasonable.

7. Select all of the following equations that are true when 27.3 is used. Use number sense to help. **1 point**

- $\div 10 = 2.73$
 $\div 1 = 27.3$
 $\div 1 = 2.73$
 $\div 10 = 27.3$
 $\div 100 = 0.273$

8. Which division equation does the model Mizuki made represent? **1 point**



- (A) $1.28 \div 4 = 0.32$
(B) $1.28 \div 4 = 0.23$
(C) $0.92 \div 4 = 0.32$
(D) $0.92 \div 4 = 0.23$

9. If 8 pounds of peanuts costs \$12, how much does 1 pound of peanuts cost? Use the answer to find how much 10 pounds of peanuts will cost. **2 points**

**1 pound costs \$1.50;
 $1.5 \times 10 = 15$; \$15 for
10 pounds.**

10. Use the equation $3.4 \div n = 0.34$.

- A. What value of n makes the equation true? Write your answer using an exponent. **1 point**

10^1

- B. Explain how you know your answer is correct. **1 point**

Sample answer: The decimal point moved 1 place to the left, so I know the divisor is 10^1 .

11. Alexandra is dividing 52.8 ounces of cereal equally into 9 bags. Which is the best way to estimate the amount of cereal in each bag? **1 point**

- (A) $56 \div 7 = 8$
(B) $54 \div 9 = 6$
(C) $50 \div 5 = 10$
(D) $55 \div 11 = 5$

12. Ken bought 15 erasers for \$4.20. Each eraser cost the same amount.

- A. Estimate the amount Ken paid for each eraser. Write an equation to model your work. **2 points**

**Sample answer: \$0.30;
 $4.5 \div 15 = 0.3$**

- B. Find the exact cost of each eraser. **1 point**

**\$0.28;
 $4.20 \div 15 = 0.28$**

- C. Compare your estimate to your answer. Is your answer reasonable? Explain. **2 points**

**Sample answer:
\$0.28 is close to
\$0.30, so my answer
is reasonable.**

13. Choose the correct quotient for each expression. **1 point**

	0.603	0.63	0.063	6.03
$60.3 \div 10^2$	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
$0.63 \div 10$	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
$6,030 \div 10^3$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
$63 \div 10^2$	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. A parks department is fencing off a square portion of a park for a memorial. The perimeter of the square is 50.8 meters.



- A. How many meters long is each side of the square? Write an equation to model your work. **2 points**

12.7 meters;
 $50.8 \div 4 = 12.7$

- B. Ten posts were used to secure the fence. A hole was dug for each post and a total of 23.5 pounds of concrete were poured into the holes. An equal amount of concrete was poured into each hole. How much concrete was poured into each hole? **1 point**

2.35 pounds

15. Select all of the following equations that are true when 88.2 is used. Use number sense to help. **1 point**

- $\div 10^3 = 0.0882$
 $\div 10^1 = 882$
 $\div 10^0 = 8.82$
 $\div 10^0 = 88.2$
 $\div 10^2 = 88.2$

16. A box of oil paints contains 9 cans of different colors. Each can is the same weight. If the box weighs 20.25 pounds, how much does each can weigh? How many pounds in total would a box of oil paints be if the weight per can remained the same and there were 6 cans in the box? Show your work. **2 points**

A can weighs 2.25 pounds; $20.25 \div 9 = 2.25$. If there were 6 cans, the box would be 13.5 pounds; $2.25 \times 6 = 13.5$

17. One serving of Luna's tomato soup is 0.75 cup. How many servings are in a 72-cup pot? Evaluate the expression $72 \div 0.75$ to help you. **1 point**
- (A) 104.2 servings (C) 10.42 servings
 (B) 96 servings (D) 9.6 servings

18. When solving $62.1 \div 10^3$, how is the decimal point moved? **1 point**
- (A) 3 places to the right
 (B) 3 places to the left
 (C) 2 places to the right
 (D) 2 places to the left

19. A board is 10.17 feet long. Sandy needs to cut the board into 3 equal sections. How long will each section be? How many sections would be needed for each section of the 10.17-foot-long board to be 5.085 feet each? Write an equation to model your work. **3 points**

3.39 feet;

$$10.17 \div 3 = 3.39$$

2 sections;

$$10.17 \div 5.085 = 2$$

20. When dividing 751.6 by 10^2 , how should the decimal point be moved? **1 point**

Sample explanation:
Since the divisor is 10^2 ,
the decimal point should
move 2 places to the left.

21. Hunter says that there should be a decimal point in the quotient below after the 6. Is he correct? Use number sense to explain your answer. **2 points**

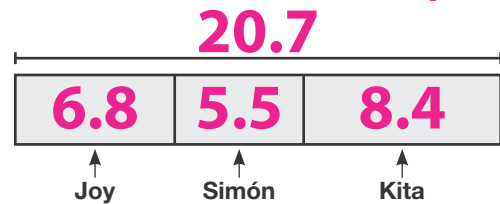
$$69.48 \div 7.2 = 965$$

Hunter is not correct.

Sample explanation: I
used compatible numbers
to estimate: $70 \div 7 = 10$;
and 10 is not close to
96.5. The decimal goes
after the 9.

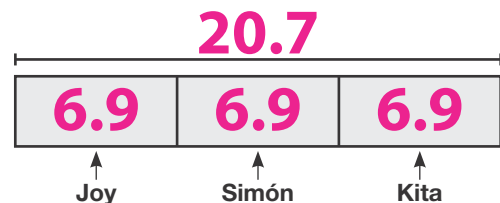
22. Three friends are participating in a charity run. Joy ran 6.8 miles, Simón ran 5.5 miles, and Kita has run 8.4 miles.

- A. Complete the bar diagram to find the total distance the friends have run. **2 points**



20.7 miles

- B. If each friend ran the same distance of the charity run, how many miles would each friend run? Complete the bar diagram to help you. **2 points**



- C. It took Simón 33 minutes to run 5.5 miles. Did he run faster or slower than 1 mile every 5 minutes? How can you tell? **2 points**

Slower. $33 \div 5.5 = 6$;
6 minutes is greater
than 5 minutes so
Simon ran slower than
1 mile every 5 minutes.