

Name _____ Date _____

1. $156 \div 24$ and $102 \div 15$ both have a quotient of 6 and a remainder of 12.
 - a. Are the division expressions equivalent to each other? Use your knowledge of decimal division to justify your answer.
 - b. Construct your own division problem with a two-digit divisor that has a quotient of 6 and a remainder of 12 but is not equivalent to the problems in 1(a).
2. Divide, then check your work with multiplication.
 - a. $36.14 \div 13$
 - b. $62.79 \div 23$
 - c. $12.21 \div 11$
 - d. $6.89 \div 13$
 - e. $249.6 \div 52$
 - f. $24.96 \div 52$
 - g. $300.9 \div 59$
 - h. $30.09 \div 59$

3. The weight of 72 identical marbles is 183.6 grams. What is the weight of each marble? Explain how you know the decimal point of your quotient is placed reasonably.
4. Cameron wants to measure the length of his classroom using his foot as a length unit. His teacher tells him the length of the classroom is 23 meters. Cameron steps across the classroom heel to toe and finds that it takes him 92 steps. How long is Cameron's foot in meters?
5. A blue rope is three times as long as a red rope. A green rope is 5 times as long as the blue rope. If the total length of the three ropes is 508.25 meters, what is the length of the blue rope?

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1. Estimate. Then, divide using the standard algorithm and check.

a. $45.15 \div 21$

b. $14.95 \div 65$

2. We learned today that division expressions that have the same quotient and remainders are not necessarily equal to each other. Explain how this is possible.

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1. Create two whole number division problems that have a quotient of 9 and a remainder of 5. Justify which is greater using decimal division.

2. Divide, then check your work with multiplication.

a. $75.9 \div 22$

c. $77.14 \div 38$

b. $97.28 \div 19$

d. $12.18 \div 29$

3. Divide.

a. $5,224 \div 43$

b. $1,908 \div 36$

4. Use the quotients in Problem 3 to write the quotients for the following. Explain how you decided where to place the decimal in the quotient.

a. $522.4 \div 43 =$ _____

$52.24 \div 43 =$ _____

b. $190.8 \div 36 =$ _____

$19.08 \div 36 =$ _____

5. The height of Burj Dubai, the tallest building in the world (2013), has a total of 162 stories. If the building is 828 meters tall, about how many meters tall is each story?

6. Elaine has a desktop that is 4.5 feet by 5.5 feet, and she is going to cover it with patches of wallpaper that each measure 18 inches wide and 24 inches long.

How many patches will Elaine need to cover the entire desktop? Justify your answer.