

LESSON

Practice C**3-7*****Dividing Decimals by Whole Numbers*****Find each quotient.**

1. $2.36 \div 8$

2. $0.1488 \div 3$

3. $72.654 \div 6$

4. $8.523 \div 9$

5. $115.8 \div 12$

6. $0.952 \div 17$

7. $46.545 \div 29$

8. $14.795 \div 55$

9. $0.2808 \div 75$

Evaluate $x \div 6$ for each value of x .

10. $x = 4.8$

11. $x = 0.54$

12. $x = 0.024$

13. $x = 1.08$

14. $x = 0.42$

15. $x = 0.0012$

Evaluate.

16. $n \div 19$ for $n = 28.5$

17. $(6^2 + 1.35) \div c$ for $c = 5$

18. $4^3 - (0.81 \div x)$ for $x = 9$

19. $3.5t \div 4$ for $t = 19.36$

20. As of 2000, there were 281.42 million people in the United States. If the same number of people lived in each of the 50 states, what would have been the population of each state in 2000?

21. In a gymnastics competition, Kim scored 9.4, 9.7, 9.9, and 9.8. Tamara scored 9.5, 9.2, 9.7, and 9.6. Who had the highest average score?

LESSON

3-7

Exploration Recording Sheet

Dividing Decimals by Whole Numbers

1. Four friends go on a vacation together. They decide to share all expenses evenly. Estimate the per person cost of each item, and then compute the actual cost with a calculator.

Item	Total Cost	Estimated Cost per Person	Actual Cost per Person
Cab fare	\$50.00	$\frac{60}{4} = \$15$	\$12.50
Pizza	\$13.92	$\frac{12}{4} = \$3$	\$3.48
Movie rental	\$10.00	$\frac{8}{4} = \$2$	\$2.50
Dinner	\$76.20	$\frac{80}{4} = \$20$	\$19.05
Boat ride	\$35.96	$\frac{36}{4} = \$9$	\$8.99

Estimate each quotient. Use this estimation to decide where to place a decimal point in the answer. Check with your calculator.

2. $125.2 \div 25 = 5.008$

3. $40 \div 16 = 2.5$

4. $7.5 \div 5 = 1.5$

5. $75 \div 12 = 6.25$

Think and Discuss

6. **Discuss** your strategies for estimating in Exercise 1.

Possible answer: Round to a number easily divisible by 4.

7. **Explain** how you know where to place the decimal point in a quotient.

Possible answer: By estimating you get a rough idea of the answer to help in placing the decimal point.

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Practice A

Dividing Decimals by Whole Numbers

Find each quotient.

1. $2.8 \div 4$ 2. $1.8 \div 2$ 3. $3.6 \div 6$

0.7 0.9 0.6

4. $7.2 \div 9$ 5. $0.15 \div 3$ 6. $4.8 \div 8$

0.8 0.05 0.6

7. $0.8 \div 4$ 8. $2.1 \div 7$ 9. $0.32 \div 4$

0.2 0.3 0.08

10. $5.4 \div 9$ 11. $3.5 \div 5$ 12. $0.2 \div 2$

0.6 0.7 0.1

Evaluate the expression $2.4 \div x$ for the given value of x .

13. $x = 8$ 14. $x = 2$ 15. $x = 3$

0.3 1.2 0.8

16. $x = 4$ 17. $x = 6$ 18. $x = 12$

0.6 0.4 0.2

19. A six-pack of orange soda costs \$4.20. How much does each can in the pack cost?

\$0.70

20. It rained 2.7 inches in July and 2.1 inches in August. What was the average rainfall for those two months?

2.4 inches

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Practice B

Dividing Decimals by Whole Numbers

Find each quotient.

1. $0.81 \div 9$ 2. $1.84 \div 4$ 3. $7.2 \div 6$

0.09 0.46 1.2

4. $13.6 \div 8$ 5. $4.55 \div 5$ 6. $29.6 \div 8$

1.7 0.91 3.7

7. $15.57 \div 9$ 8. $0.144 \div 12$ 9. $97.5 \div 3$

1.73 0.012 32.5

10. $0.0025 \div 5$ 11. $2.84 \div 8$ 12. $18.9 \div 3$

0.0005 0.355 6.3

Evaluate the expression $2.094 \div x$ for the given value of x .

13. $x = 2$ 14. $x = 4$ 15. $x = 12$

1.047 0.5235 0.1745

16. $x = 20$ 17. $x = 15$ 18. $x = 30$

0.1047 0.1396 0.0698

19. There are three grizzly bears in the city zoo. Yogi weighs 400.5 pounds, Winnie weighs 560.35 pounds, and Nyla weighs 618.29 pounds. What is the average weight of the three bears?

526.38 pounds

20. The bill for dinner came to \$75.48. The four friends decided to leave a \$15.00 tip. If they shared the bill equally, how much will they each pay?

\$22.62

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Practice C

Dividing Decimals by Whole Numbers

Find each quotient.

1. $2.36 \div 8$ 2. $0.1488 \div 3$ 3. $72.654 \div 6$

0.295 0.0496 12.109

4. $8.523 \div 9$ 5. $115.8 \div 12$ 6. $0.952 \div 17$

0.947 9.65 0.056

7. $46.545 \div 29$ 8. $14.795 \div 55$ 9. $0.2808 \div 75$

1.605 0.269 0.003744

Evaluate $x \div 6$ for each value of x .

10. $x = 4.8$ 11. $x = 0.54$ 12. $x = 0.024$

0.8 0.09 0.004

13. $x = 1.08$ 14. $x = 0.42$ 15. $x = 0.0012$

0.18 0.07 0.0002

Evaluate.

16. $n \div 19$ for $n = 28.5$ 17. $(6^2 + 1.35) \div c$ for $c = 5$

1.5 7.47

18. $4^3 - (0.81 \div x)$ for $x = 9$ 19. $3.5t \div 4$ for $t = 19.36$

63.91 16.94

20. As of 2000, there were 281.42 million people in the United States. If the same number of people lived in each of the 50 states, what would have been the population of each state in 2000?

5.6284 million

21. In a gymnastics competition, Kim scored 9.4, 9.7, 9.9, and 9.8. Tamara scored 9.5, 9.2, 9.7, and 9.6. Who had the highest average score?

Kim

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