

Independent Practice

5.5

NAME _____

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

Estimate.

1. $47.6 \div 11.9$

$48 \div 12 = 4$
 $47.6 \div 11.9 \approx 4$

2. $115.65 \div 38.12$

$120 \div 40 = 3$
 $115.65 \div 38.12 \approx 3$

3. $71.2 \div 36.88$

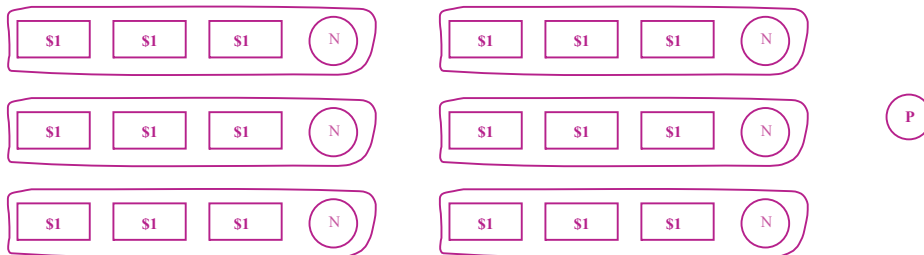
$72 \div 36 = 2$
 $71.2 \div 36.88 \approx 2$

4. $487.73 \div 4.6$

$500 \div 5 = 100$
 $487.73 \div 4.6 \approx 100$

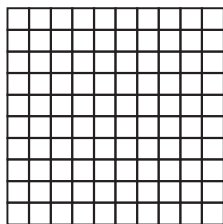
Divide using a model.

5. If \$18.31 is divided evenly among six friends, how much does each friend receive? What, if anything, is left over?

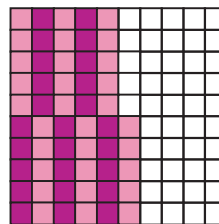


\$3.05 each with \$0.01 left over

6. How many nickels are in \$0.58? If necessary, express the remainder as a decimal part of a nickel.



11.6 nickels



7. How many quarters are in \$2.15? If necessary, express the remainder as a decimal part of a quarter.



8.6 quarters

Estimate and divide.

8. $6 \div 16$

$6 \div 15 = 0.4$
 $6 \div 16 = 0.375$

9. $7 \div 11$

$7 \div 14 = 0.5$
 $7 \div 11 = 0.\overline{63}$

10. $98.6 \div 29$

$90 \div 30 = 3$
 $98.6 \div 29 = 3.4$

11. $88.8 \div 16$

$90 \div 15 = 6$
 $88.8 \div 16 = 5.55$

12. $8.1 \div 1.8$

$8 \div 2 = 4$
 $8.1 \div 1.8 = 4.5$

13. $52.64 \div 9.4$

$50 \div 10 = 5$
 $52.64 \div 9.4 = 5.6$

14. $723.6 \div 20.1$

$720 \div 20 = 35$
 $723.6 \div 20.1 = 36$

15. $13.062 \div .042$

$12,000 \div 40 = 300$
 $13.062 \div .042 = 311$

16. $71.877 \div 0.97$

$72 \div 1 = 72$
 $71.877 \div 0.97 = 74.1$

Simplify.

17. $50.676 \div (3.2 + 9.1)$

4.12

18. $19.2 \div 6 \div 1.5$

2. $\overline{13}$

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Journal

1. Find each quotient.

$$10.8 \div 3$$
$$10.8 \div 0.3$$

Compare the quotients and dividends. How does dividing by a number greater than one compare to dividing by a number between zero and one?

2. Jasmine incorrectly divided as shown below. Find and explain her error.

$$\begin{array}{r} .24 \\ 16 \overline{)3.264} \\ \underline{-3.2} \\ 064 \\ \underline{-64} \\ 0 \end{array}$$

3. Tory and Greg need to solve $13.77 \div 16.2$. Tory thinks that each decimal point should be moved one place to the right and Greg thinks each decimal point should be moved two places to the right. Who is correct and why?

Cumulative Review

Round each decimal to the nearest whole number, tenth, and hundredth.

1. 11.226

2. 0.2481

3. 0.941

11; 11.2; 11.23

0; 0.2; 0.25

1; 0.9; 0.94

Use $<$, $>$, or $=$ to compare each pair of numbers.

4. 4.2 and 4.02

$4.2 > 4.02$

5. 5% and 0.5

$5\% < 0.5$

6. -3.5 and -3.500

$-3.5 = -3.500$

7. $\frac{1}{3}$ and 0.33

$\frac{1}{3} > 0.33$

Evaluate each expression.

8. $0.26 + 2.6$

2.86

9. $5.81 + 22.09$

27.9

10. $12.757 + 3.98$

16.737

11. $1.5 - 0.02$

1.48

12. $120.45 - 76.14$

44.31

13. $99 - 3.01$

95.99

Evaluate each expression.

14. 0.8×4

3.2

15. $0.15 \times 1,000$

150

16. 2.56×1.9

4.864

17. 4.05×3.12

12.636

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Possible Journal Answers

1. $10.8 \div 3 = 3.6$
 $10.8 \div 0.3 = 36$

When the divisor is greater than one, the quotient is less than the dividend.
When the divisor is between zero and one, the quotient is greater than the dividend.

2. Jasmeen did not add a zero as a placeholder in the hundredths place in the quotient. The divisor 16 does not divide into six, so a zero has to be placed between the two and four.

$$\begin{array}{r} .204 \\ 16 \overline{)3.264} \\ \underline{-3.2} \\ 06 \\ \underline{-0} \\ 64 \\ \underline{-64} \\ 0 \end{array}$$

3. Both students are correct. Tory moved the decimals one place to the right and divided 137.7 by 162. Greg moved the decimals two places to the right and divided 1377 by 1620. Both students got 0.85 for an answer.

