



Name _____ Date _____

Dividing by Decimals (pages 157–159)

When you divide decimals by decimals, you must change the divisor to a whole number. To do this, multiply both the divisor and dividend by the same power of 10. Then divide as with whole numbers.

EXAMPLE

Find each quotient.

$$4.4 \div 2.5$$

First estimate: $4 \div 2 = 2$

$$\begin{array}{r} 1.76 \\ 2.5 \overline{)44.00} \\ \underline{-25} \\ 190 \\ \underline{-175} \\ 150 \\ \underline{-150} \\ 0 \end{array}$$

Multiply the dividend and divisor by 10. Place the decimal point. Divide as with whole numbers.

Try These Together

Find each quotient.

1. $5.4 \div 1.2$

HINT: Multiply the dividend and divisor by the same power of 10.

2. $6.3 \div 1.8$

HINT: Multiply the dividend and divisor by the same power of 10.

PRACTICE

Find each quotient.

3. $3.9 \overline{)849.03}$

4. $0.97 \overline{)477.24}$

5. $5.97 \overline{)3,826.77}$

6. $9.2 \overline{)1.748}$

7. $11.5 \overline{)634.11}$

8. $0.003 \overline{)0.0051}$

9. $0.15 \div 0.008$

10. $190.92 \div 0.086$

11. $8.814 \div 0.0678$

12. $0.0874 \div 0.076$

13. $46.99155 \div 52.3$

14. $7,544.5587 \div 309.33$

Solve each equation.

15. $s = 13.92 \div 0.87$

16. $r = 22.94 \div 0.74$

17. $102.3627 \div 930.57 = p$

18. $0.0018 \div 0.006 = n$

19. $g = 2.414 \div 7.1$

20. $3.7505 \div 0.065 = v$

21. **Hobbies** Paquita wants to make a necklace 55.9 cm long using beads with a diameter of 1.3 cm. How many beads does she need?



22. **Standardized Test Practice** Find $4.998 \div 3.4$.

A 1.47

B 1.52

C 6.82

D 16.99

Answers: 1. 4.5, 2. 3.5, 3. 217.7, 4. 492, 5. 641, 6. 0.19, 7. 55.14, 8. 1.7, 9. 18.75, 10. 2.220, 11. 130, 12. 1.15, 13. 0.8985, 14. 24.39, 15. 16, 16. 31, 17. 0.11, 18. 0.3, 19. 0.34, 20. 57.7, 21. 43 beads, 22. A