



SKILL 21: Dividing a Decimal by a Decimal

Remember that to divide by a decimal, multiply both the dividend and the divisor by 10, 100, or 1,000 so that the divisor is a whole number. Write the decimal point in the quotient and divide.

Example

Divide: $0.24 \div 3.2$.

Multiply 3.2 and 0.24 by 10 so the divisor is a whole number.

$$3.2 \overline{)0.24}$$

$$0.24 \div 3.2 = 0.075$$

Put the decimal point in the quotient.

$$32 \overline{)0.24}$$

There are no 32s in 2 or in 24. Write 0s in the quotient.

$$32 \overline{)0.24} \begin{array}{r} 0.0 \\ \end{array}$$

Annex zeros and continue dividing.

$$32 \overline{)0.2400} \begin{array}{r} 0.075 \\ \underline{224} \\ 160 \\ \underline{160} \\ 0 \end{array}$$

Guided Practice

Place the decimal point correctly in each quotient.

$$1. \quad 0.6 \overline{)0.78} \begin{array}{r} 13 \\ \end{array}$$

$$2. \quad 0.25 \overline{)4.25} \begin{array}{r} 17 \\ \end{array}$$

$$3. \quad 0.85 \overline{)7.055} \begin{array}{r} 83 \\ \end{array}$$

$$4. \quad 3.7 \overline{)1.036} \begin{array}{r} 028 \\ \end{array}$$

$$5. \quad 1.8 \overline{)8.28} \begin{array}{r} 46 \\ \end{array}$$

$$6. \quad 0.63 \overline{)0.6678} \begin{array}{r} 106 \\ \end{array}$$

$$7. \quad 0.04 \overline{)0.916} \begin{array}{r} 229 \\ \end{array}$$

$$8. \quad 0.125 \overline{)9.875} \begin{array}{r} 79 \\ \end{array}$$

Divide.

$$9. \quad 0.5 \overline{)0.095}$$

$$10. \quad 0.9 \overline{)1.08}$$

$$11. \quad 0.28 \overline{)0.476}$$

$$12. \quad 0.7 \overline{)0.0434}$$

SKILL 21: Practice

Divide.

1. $0.7 \overline{)6.3}$

2. $0.9 \overline{)0.18}$

3. $0.6 \overline{)0.48}$

4. $0.8 \overline{)1.12}$

5. $0.16 \overline{)2.56}$

6. $0.36 \overline{)0.288}$

7. $0.08 \overline{)18}$

8. $1.4 \overline{)13.86}$

9. $1.7 \overline{)10.54}$

10. $2.4 \overline{)0.168}$

11. $0.07 \overline{)0.035}$

12. $0.96 \overline{)0.0192}$

13. $0.35 \div 0.07 = \underline{\hspace{2cm}}$

14. $0.2068 \div 4.4 = \underline{\hspace{2cm}}$

15. $0.015 \div 0.05 = \underline{\hspace{2cm}}$

16. $13.76 \div 3.2 = \underline{\hspace{2cm}}$

17. $0.441 \div 6.3 = \underline{\hspace{2cm}}$

18. $0.0602 \div 0.086 = \underline{\hspace{2cm}}$

Solve.

19. Teri paid \$3.06 for apples that cost \$.68 a pound. How many pounds of apples did she buy? _____

20. Lin bought 9.2 gallons of gasoline for \$12.42 and paid for it with a \$20 bill. What was the price of one gallon of gasoline? _____

21. Mr. Smith drove 381.9 miles in 8.5 hours. What was the average number of miles he drove each hour? Round your answer to the nearest tenth of a mile. _____



22. Divide:
- $0.288 \div 9.6$
- .

A 0.003

C 0.3

B 3

D 0.03

Skill 21

23. Find the product:
- 0.35×0.16
- .

F 0.056

H 0.56

G 0.530

J 5.60

Skill 13