



Name _____

Dividing a Decimal by a Decimal

R 2-5

To divide a decimal by a decimal, multiply the divisor by a multiple of ten to make the divisor a whole number. Multiply the dividend by the same number. Then divide.

Find $12.6 \div 6.3$

$$\begin{array}{c} \downarrow \quad \downarrow \\ 12 \div 6 = 2 \end{array}$$

Estimate.

Find $10.8 \div 2.25$

$$\begin{array}{c} \downarrow \quad \downarrow \\ 10 \div 2 = 5 \end{array}$$

To find the exact answer:

$6.3 \overline{) }$	<p>← Step 1 Think of a multiple of 10 that will make the divisor a whole number.</p>	$2.25 \overline{) 00.00}$
$63 \overline{) 126.}$	<p>← Step 2 Multiply the divisor and the dividend by the same multiple of 10.</p>	$225 \overline{) 1080.}$
$\begin{array}{r} 2. \\ 63 \overline{) 126.} \\ \underline{126} \\ 0 \end{array}$	<p>← Step 3 Place the decimal point in the quotient. Divide. Place zeros in the dividend if needed. Divide until the remainder is zero.</p>	$\begin{array}{r} 4.8 \\ 225 \overline{) 1080.0} \\ \underline{900} \\ 1800 \\ \underline{1800} \\ 0 \end{array}$

Place the decimal point in each quotient.

1. $26.1 \div 3 = 8 \ 7$

2. $313.6 \div 4.9 = 6 \ 4$

3. $0.84 \div 6 = 0 \ 1 \ 4$

Divide.

4. $3.1 \overline{) 3.72}$

5. $4.5 \overline{) 1.260}$

6. $2.3 \overline{) 9.2}$

7. $5.6 \overline{) 16.8}$

8. $24.38 \div 5.3 = \underline{\hspace{2cm}}$

9. $8.62 \div 0.2 = \underline{\hspace{2cm}}$

10. $37.44 \div 0.04 = \underline{\hspace{2cm}}$

11. $15.56 \div 0.08 = \underline{\hspace{2cm}}$

12. $20.02 \div 0.7 = \underline{\hspace{2cm}}$

13. $31.2 \div 3.9 = \underline{\hspace{2cm}}$