

Lesson 3.11 Dividing Decimals Using Rules

When the divisor of a division problem contains a decimal point, multiply both the divisor and the dividend by the power of ten needed to make the divisor a whole number. Then, solve the problem.

$$\begin{aligned} 9.45 \div 0.9 &= \\ (9.45 \times 10) \div (0.9 \times 10) &= \\ 94.5 \div 9 &= 10.5 \end{aligned}$$

When multiplying by 10 to the first power, move the decimal point to the right one place. Add or remove zeros if necessary.

Write the power of ten needed to solve each problem. Then, solve the problem.

a

1. $0.11 \overline{)1.87}$
Power of 10 _____

b

$0.13 \overline{)1.95}$
Power of 10 _____

c

$1.5 \overline{)2.4}$
Power of 10 _____

2. $0.18 \overline{)1.62}$
Power of 10 _____

$0.12 \overline{)1.56}$
Power of 10 _____

$1.8 \overline{)1.62}$
Power of 10 _____

3. $1.25 \overline{)11}$
Power of 10 _____

$1.3 \overline{)2.34}$
Power of 10 _____

$0.18 \overline{)2.34}$
Power of 10 _____

4. $1.3 \overline{)2.47}$
Power of 10 _____

$0.1 \overline{)1.60}$
Power of 10 _____

$0.9 \overline{)1.62}$
Power of 10 _____