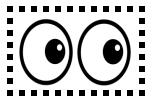


Dividing Decimals by Decimals



Terms: Dividend-A number being divided by another number
Divisor - A number that another number is being divided by
Quotient - The result of dividing one number by another number



Objective: I will accurately divide a decimal number by a decimal number.

Explanation/Rationale: Michelle purchases several bottles of water. Before tax is added, the total cost is \$3.60 and the cost of each bottle is \$1.20. How many bottles did she buy?



Steps:

1. Move the decimal point in the divisor to the right to create a whole number.
2. Count the number of places you moved the decimal point.
3. Move the decimal point in the dividend to the right the same number of places as in the divisor (your answer in #2).
4. Divide the numbers - annex zeros if necessary.
5. Place a decimal point in the quotient directly above the newly moved decimal point in the dividend.

$$1.20 \overline{) 3.60}$$

2

$$1.20 \overline{) 3.60}$$

$$\begin{array}{r} 120 \overline{) 360} \\ -360 \\ \hline 0 \end{array}$$

$$\begin{array}{r} 120 \overline{) 360} \\ -360 \\ \hline 0 \end{array}$$

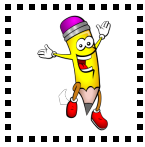
Notes and Handouts

Name: _____

Unit 1 Whole and Decimal Number Operations

Math6

Period: _____



Examples:

1) $0.432 \div 0.18$

2) $4669 \div 14.5$

Handwritten long division for $0.432 \div 0.18$. The divisor is 0.18 and the dividend is 0.432. The quotient is 2.4. The steps shown are: $0.18 \times 2 = 0.36$, subtracted from 0.432 to get 0.072; then $0.18 \times 4 = 0.72$, subtracted from 0.72 to get 0. The final answer is 2.4.

Handwritten long division for $4669 \div 14.5$. The divisor is 14.5 and the dividend is 4669.0. The quotient is 322. The steps shown are: $14.5 \times 3 = 43.5$, subtracted from 46.6 to get 3.1; then $14.5 \times 2 = 29.0$, subtracted from 31.9 to get 2.9; then $14.5 \times 2 = 29.0$, subtracted from 2.90 to get 0. The final answer is 322.



YOU GOT THIS:

1) $5.18 \div 0.7$

2) $6.89 \div 1.3$

3) $46.2 \div 16.5$