

MATH MINUTE VOLUME 4

Chapter 4 Key Concepts

- Algebraic Expressions
- Equivalent Ratios
- Variable
- Similar Figures



just do it.

$$x + 5 = 4$$

$$\frac{x}{2} = 9$$

$$7x = 21$$

$$x - 3 = 7$$

Dividing Decimal by Decimal

Make the divisor a whole number by moving the decimal point to the right. Move the decimal point in the dividend by the same number of hops. This is the same as multiplying both numbers by 10 (for each hop.)

$$.2 \overline{)12.64}$$

$$2 \overline{)126.4}$$

Place the decimal point in the answer lined up with decimal point in the dividend.

$$2 \overline{)126.4}$$

Divide the numbers. Be sure that the decimal points remain lined up.

$$63.2 \\ 2 \overline{)126.4}$$

Example

$$\begin{array}{r} 0.31 \\ 8.4 \overline{)2.604} \\ \underline{-252} \\ 84 \\ \underline{-84} \\ 0 \end{array}$$



"I don't like long division; I always feel bad for the remainders."

Parent Signature: _____

Equivalent Ratios

Find Two Equivalent Ratios

5:20

Multiply

$$5:20 \rightarrow \frac{5}{20}$$

$$\frac{5}{20} \cdot \frac{2}{2} = \frac{5 \cdot 2}{20 \cdot 2} = \frac{10}{40}$$

$$\frac{10}{40} \rightarrow \boxed{10:40}$$

Divide

$$5:20 \rightarrow \frac{5}{20}$$

$$\frac{5}{20} \div \frac{5}{5} = \frac{5 \div 5}{20 \div 5} = \frac{1}{4}$$

$$\frac{1}{4} \rightarrow \boxed{1:4}$$

EVALUATING ALGEBRAIC EXPRESSIONS

Find the value of $7m + 9$ for $m = 2$

Remember a variable next to a number means to multiply!

1. Substitute the number for the variable.

$$7(2) + 9$$

2. Solve using order of operations.

$$7(2) = 14 \quad 14 + 9 = 23$$

