

## Math 8

Gross

$$\begin{array}{r} 6 \\ \times 9 \\ \hline 54 \end{array}$$

factors  
product

$$\begin{array}{r} 12 \\ + 15 \\ \hline 27 \end{array}$$

addends  
sum

divisor  $2.48$  ← quotient↳  $64 \overline{) 158.72}$  ← dividend

$$\begin{array}{r} -128 \\ \hline 307 \\ -256 \\ \hline 512 \\ -512 \\ \hline \end{array}$$

$$\begin{array}{r} 352.06 \\ -149.78 \\ \hline 202.28 \end{array}$$

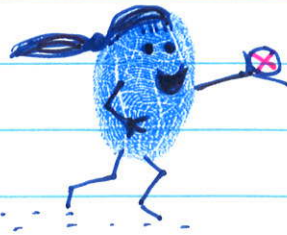
difference

How you can show multiplication:

$$7(8) = 56$$

$$4 \cdot 9 = 36$$

$$6x + 2x = 8x$$

Order of operations

- 1) Parenthesis
- 2) Exponents
- 3) Multiplication OR Division
- 4) Addition OR Subtraction

← as they appear

$$\begin{aligned}
 &5 [4 + (12 - 4) \div 2] \\
 &5 [4 + 8 \div 2] \\
 &5 [4 + 4] \\
 &5 [8] \\
 &40
 \end{aligned}$$

## Variables & Expressions

Expression:  
 $4x + 12$

- terms are separated by  $\oplus$  or  $\ominus$
- there are two terms in this expression

Equations have equal signs!

$$4x + 12 = 32$$

$$\begin{array}{r} -12 \\ \hline 4x = 20 \end{array}$$

$$\begin{array}{r} 4 \\ \hline x = 5 \end{array}$$

$$x = 5$$

← This is the solution!

$$5q - 7 = 33$$

$$\begin{array}{r} +7 \\ \hline 5q = 40 \end{array}$$

$$\begin{array}{r} 5 \\ \hline q = 8 \end{array}$$

$$q = 8$$

- this is an open sentence
- 5 is the coefficient
- $q$  is a variable
- 7 is a constant
- 33 is a constant
- 8 is the solution