MOMENTUM MATH LEVEL H



Unit 3 – Equations and Inequalities		
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EQUALITY

Today's Destination What is a balanced equation?



Vocabulary —

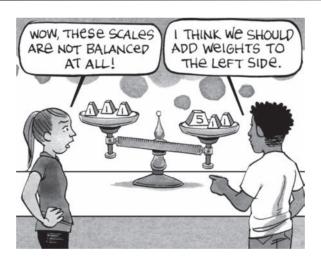
Equal Sign (=) A symbol that indicates that two quantities have the same value

Equation A number sentence relating two expressions that are equal in value

Expression A symbol or combination of symbols that represents a quantity



Problem of the Day



How much weight should Matt and Marta add to the left side to balance the scales?



IN THE DRIVER'S SEAT

Write an equation to represent each situation below.

In one week, Elena walked the family dog 3 times as frequently as her brother Nicky. If Elena walked the dog 18 times in all, how many times did Nicky walk the dog?

Write It! Let
$$d =$$
______.

=

Ariana paid \$20 for a necklace, which is \$3 more than twice the amount Peggy paid for the 2) same necklace. How much did Peggy pay?

Let
$$n =$$

Four brothers split an entire pizza among themselves. If each brother ate 3 slices, how many slices did the pizza contain altogether?

Shania made \$5 an hour as a hostess at a restaurant, plus \$15 in tips on Saturday afternoon. If Shania made \$35, how many hours did she work?

A phone company charges \$10 each month plus \$0.10 per minute of long-distance calling. 5) If Kira's bill was \$18.50 last month, how many minutes of long distance did she use?

Write
$$t!$$
 Let $m =$ _____.

____= ____

SIDE TRIPS

Write It!

- 1) Find the possible side lengths for a trapezoid with the following characteristics:
 - The perimeter of the trapezoid must be no more than 86 inches.
 - The second side of the trapezoid is 3 inches shorter than the first side.
 - The third side of the trapezoid is half of the first side plus 2 inches.
 - The fourth side of the trapezoid is 5 inches shorter than the third side.

Write an expression to represent each side of the trapezoid, in terms of x.

Let x = the first side.

Write an inequality to represent the perimeter of the	trapezoid, in terms of x.
Solve It!	
What are the possible lengths of each side of the tra	pezoid?
Write It!	
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