"I Can Write Equations to Represent Real-World Situations."

Writing and Solving Equations from Situations

Equals (=)	Equals	Seven less than a number equals ten	
	Is	Three times a number is negative six	
	Is the Same	Eight is the same as twice a number	
	Total	Four minus three totals one	
	Yields	Twelve added to twelve yields 24	

1. Enrique and Levi together have 386 trading cards. Enrique has 221 trading cards. If Levi has C cards, write an equation you could solve to find the number of cards Levi has.

2. It took Demitri 90 minutes to download 4 movies. If each movie takes the same amount of time, t to download, write an equation you could solve to find the time it takes to download each movie.

3. Alejandra spent her birthday money on a video game that cost $\$d$, a controller for \$13, and a memory card for \$16. She had a \$5 coupon. The total came to \$75. Write and solve an equation to find the cost of the video game.

4. During their softball season, Jessica had double the amount of hits Sam had. If Jessica and Sam together had 63 hits, write and solve an equation to find the amount of hits each girl had.

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Equals (=)	Equals	Seven less than a number equals ten	$n - 7 = 10$
	Is	Three times a number is negative six	$3 \cdot n = -6$
	Is the Same	Eight is the same as twice a number	$8 = 2 \cdot n$
	Total	Four minus three totals one	$4 - 3 = 1$
	Yields	Twelve added to twelve yields 24	$12 + 12 = 24$

1. Enrique and Levi together have 386 trading cards. Enrique has 221 trading cards. If Levi has C cards, write an equation you could solve to find the number of cards Levi has.

$$221 + C = 386$$

2. It took Demitri 90 minutes to download 4 movies. If each movie takes the same amount of time, t to download, write an equation you could solve to find the time it takes to download each movie.

$$4 \cdot t = 90 \qquad \text{or} \qquad \frac{90}{t} = 4$$

3. Alejandra spent her birthday money on a video game that cost $\$d$, a controller for \$13, and a memory card for \$16. She had a \$5 coupon. The total came to \$75. Write and solve an equation to find the cost of the video game.

$$d + 13 + 16 - 5 = 75$$

$$d + \cancel{24} \,\big|\, = 75$$
$$-\cancel{24} \,\big|\, -24$$
$$\overline{}$$
$$d \,\big|\, = 51$$

$$\boxed{\$51}$$

4. During their softball season, Jessica had double the amount of hits Sam had. If Jessica and Sam together had 63 hits, write and solve an equation to find the amount of hits each girl had.

Jessica $= 2 \cdot h$
Sam $= h$

$$2h + h = 63$$
$$3h = 63$$
$$\div 3 \,\big|\, \div 3$$
$$\overline{}$$
$$h = 21$$

$\boxed{\text{Jessica} = 2 \cdot 21 = 42 \text{ hits}}$
$\boxed{\text{Sam} = 21 \text{ hits}}$