

# MathFLIX CHALLENGE

## *Solving Absolute Value Equations*

Absolute value problems always have two solutions. Complete the problems below providing both solutions for each one.

<u>Absolute value problem</u>	<u>Solution #1</u>	<u>Solution #2</u>
$ x + 2  = 7$ $x = 5, -9$	$x + 2 = 7$ $x + 2 - 2 = 7 - 2$ $x = 5$	$x + 2 = -7$ $x + 2 - 2 = -7 - 2$ $x = -9$
$ x + 3  = 10$ $x = \underline{\quad}, \underline{\quad}$	$x + 3 = 10$	$x + 3 = -10$
$ x - 3  = 10$ $x = \underline{\quad}, \underline{\quad}$	$x - 3 = 10$	$\underline{\hspace{2cm}}$
$ 2x + 4  = 12$ $x = \underline{\quad}, \underline{\quad}$	$\underline{\hspace{2cm}}$	$2x + 4 = -12$
$ 3x + 6  = 12$ $x = \underline{\quad}, \underline{\quad}$	$\underline{\hspace{2cm}}$	$\underline{\hspace{2cm}}$
$ -x + 2  =$ $x = \underline{\quad}, \underline{\quad}$	$\underline{\hspace{2cm}}$	$\underline{\hspace{2cm}}$