

Solve each Absolute Value Equation. Check for extraneous solutions.

1. $4|x+5| - 9 = 27$

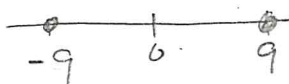
2. $|2x-3| = 4x+5$

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ANSWERS

1. $4|x+5| - 9 = 27$

$+9 +9$



$\frac{4|x+5|}{4} = \frac{36}{4}$

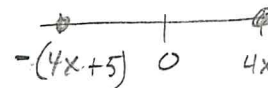
$|x+5| = 9$

/ \

$x+5 = -9$ or $x+5 = 9$
 $-5 -5$ $-5 -5$

$x = -14$ or $x = 4$

2. $|2x-3| = 4x+5$



$2x-3 = -(4x+5)$ or $2x-3 = 4x+5$

$2x-3 = -4x-5$
 $+4x +4x$

$6x-3 = -5$
 $+3 +3$

$\frac{6x}{6} = \frac{-2}{6}$

$x = -1/3$

or

$2x-3 = 4x+5$

$-2x -2x$

$-3 = 2x+5$

$-5 -5$

$-8 = 2x$
 $\frac{-8}{2} = \frac{2x}{2}$

~~$x = -4$~~

extraneous sol.