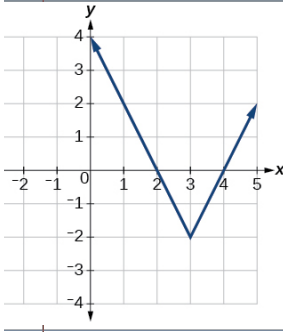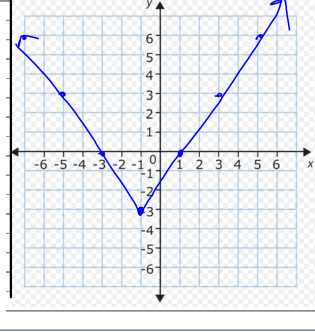**Daily Quiz**

Ⓐ Write the equation of the following absolute value function.

$y = $ _____

Ⓑ Graph the equation of the following absolute value function. $a = \frac{3}{2}$ $V(-1,-3)$
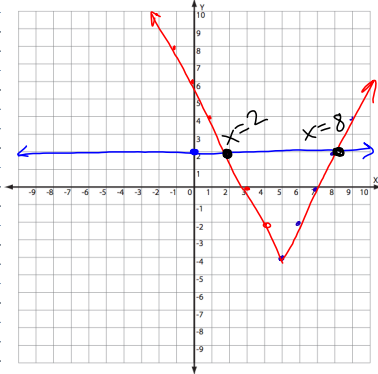
$y = \frac{3}{2}|x+1| - 3$

M1 L2.2

Solving Absolute Value Equation Graphically

Objective: Students will be able to graph absolute value equations graphically and find the solutions of the function.
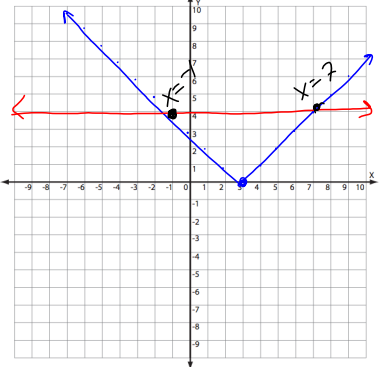
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① **Example** Solve the equation graphically.

$2|x-5| - 4 = 2$

Left side

$a = \frac{2}{1}$

$V(5,-4)$

$y = 2$

The soln. is $x = 2$ & $x = 8$

x=2   x=8

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② **Example** Solve the equation graphically.
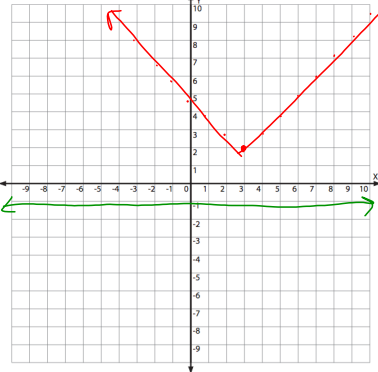
$|x-3| = 4$

$a = \frac{1}{1}$ $y = 4$

$V(3,0)$

The soln. are $x = -1$ & $x = 7$

x=-1   x=7

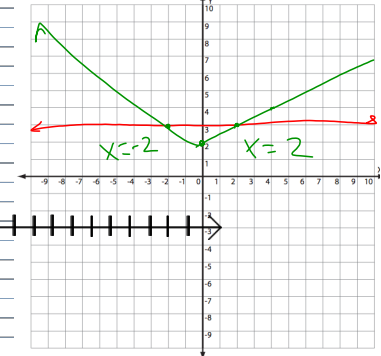④ **Example** Solve the equation graphically.

$|x-3| + 2 = -1$

$a = \frac{1}{1}$ $y = -1$

$V(3,2)$

NO soln.

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④ **Example** Solve the equation graphically.

$\frac{1}{2}|x| + 2 = 3$

$a = \frac{1}{2}$ $y = 3$

$V(0,2)$

x=-2   x=2