ES

1 2

When **Graphing Linear Functions**, you must find the *x*-coordinate and *y*-coordinate, or *x* intercept and *y* intercept. Given the linear function "$y = 2x + 6$", you must first determine the *x* intercept. To do this, substitute 0 for *y* and solve for *x*.

$$2x + 6 = 0$$

$$2x + 6 - 6 = 0 - 6$$ ⟵ touch

Reset

ES

Madison designed a life-sized number line in her school hallway. She gave four of her classmates a card with instructions on it and several cardboard circles to use as points. Using the number line below, graph the following by dragging the different colored circles to the appropriate spot.
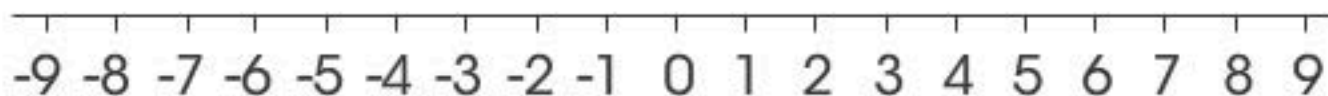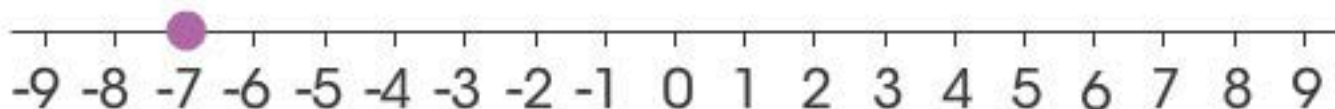
Ella	Levi	Maria	Evan
$4 > x > 0$	$x > 7$	$x + 4 = -2$	$-(-2) + x + 5 = 7$

-9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9

Touch for Solution

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ES

Graph the solution to *x* on the number line by dragging the point to its correct position.

1 2 3

-9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9

✓

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$$x + 5 = -2$$

Reset