

Bellwork Friday 09/15/2017

- Do it on the back of your bellwork worksheet from this week
- Solve the following equation:
 $|2x - 1| = 6$
- What does the graph of $|2x - 1|$ look like?

Handwritten notes and calculations:

$|5| = 5$
 $|-5| = 5$

Diagram illustrating the absolute value function $|x| = a$:

input $|x| = a$ output
if $x > 0$ $x = a$
if $x < 0$ $x = -a$

Diagram illustrating the function $|x|$:

input $|x|$ output
should always be \oplus

Solving the equation $|2x - 1| = 6$:

input $|2x - 1| = 6$ output

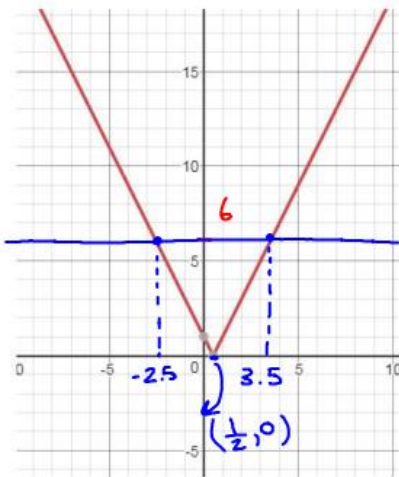
OR

$2x - 1 = 6$
 $+1 \quad +1$
 $\frac{2x}{2} = \frac{7}{2}$ $x = \frac{7}{2}$
 $x = 3.5$

$2x - 1 = -6$
 $+1 \quad +1$
 $\frac{2x}{2} = \frac{-5}{2}$ $x = -\frac{5}{2}$
 $x = -2.5$

$$y = |2x-1| = 6$$

$$y = |2x-1|$$



$$y = 0$$

$$0 = |2x-1|$$

$$2x-1=0$$

$$+1 \quad +1$$

$$2x = 1$$

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