1-3-19

Aim: SWBAT review.

HW: Test tomorrow

Do Now: True or False?

5 is a solution to... $x - 10 > 4x + 8$

5 is a solution to... $2x + 1 \leq 20$

5 is a solution to... $-3(x - 2) \geq -4(x + 1)$

True or False?

5 is a solution to...

$x - 10 > 4x + 8$

$5 - 10 \stackrel{?}{>} 4 \cdot 5 + 8$

$-5 \stackrel{?}{>} 20 + 8$

$-5 > 28$ False;

5 is not a solution

5 is a solution to...

$2x + 1 \leq 20$

$2 \cdot 5 + 1 \stackrel{?}{\leq} 20$

$10 + 1 \stackrel{?}{\leq} 20$

$11 \leq 20$

True: 5 is a solution

5 is a solution to...

$-3(x - 2) \geq -4(x + 1)$

$-3(5 - 2) \stackrel{?}{\geq} -4(5 + 1)$

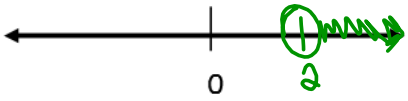
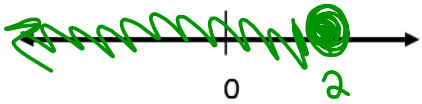
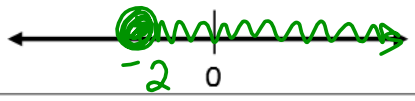
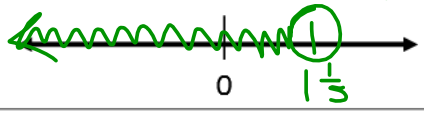
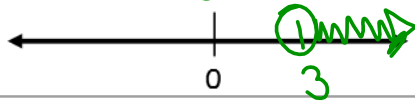
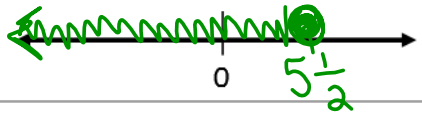
$-3(3) \stackrel{?}{\geq} -4(6)$

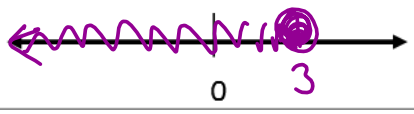
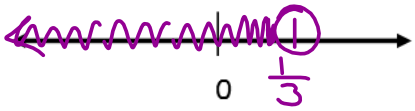
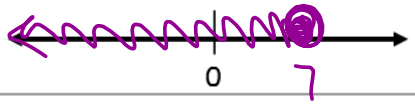
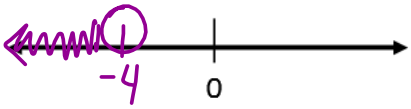
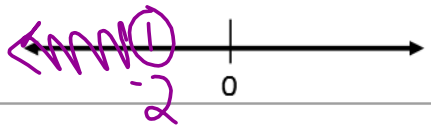
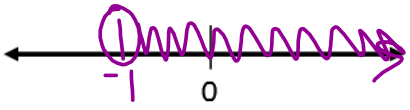
$-9 \geq -24$

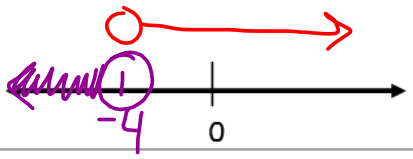
True: 5 is a solution

Aim: SWBAT solve and graph multi-step inequalities.

Solve and graph.

	A	B
1	$3(x+2) > 12$ $3x+6>12$ $-6 \quad -6$ $\frac{3x}{3} > \frac{6}{3}$ $x > 2$ 	$-5(-2x+6) \le -10$ $10x-30 \le -10$ $+30 \quad +30$ $\frac{10x}{10} \le \frac{20}{10}$ $x \le 2$ 
2	$2x-6x+3 \le 11$ $-4x+3 \le 11$ $-3 \quad -3$ $\frac{-4x}{-4} \le \frac{8}{-4}$ $x \ge -2$ 	$-5x+3+13 > 10$ $-5x+16>10$ $-16 \quad -16$ $\frac{-5x}{-5} > \frac{-6}{-5}$ $x < 1\frac{1}{5}$ 
3	$2x+3 < 6x-9$ $-2x \quad -2x$ $3 < 4x-9$ $+9 \quad +9$ $\frac{12}{4} < \frac{4x}{4}$ $3 < x$ $x > 3$ 	$-5x+30 \ge -x+8$ $+5x \quad +5x$ $30 \ge 4x+8$ $-8 \quad -8$ $\frac{22}{4} \ge \frac{4x}{4}$ $5\frac{1}{2} \ge x$ $x \le 5\frac{1}{2}$ 

	A	B
7	$26s \leq 3s + 69$ $-3s \quad -3s$ $\frac{23s}{23} \leq \frac{69}{23}$ $s \leq 3$  	$12c + 12 > 48c$ $-12c \quad -12c$ $\frac{12}{36} > \frac{36c}{36}$ $\frac{1}{3} > c$ 
8	$5x - 14 \leq 2x + 7$ $-2x \quad -2x$ $3x - 14 \leq 7$ $+14 \quad +14$ $\frac{3x}{3} \leq \frac{21}{3}$ $x \leq 7$  	$5 - 4z > 17 - z$ $+4z \quad +4z$ $5 > 17 + 3z$ $-17 \quad -17$ $\frac{-12}{3} > \frac{3z}{3}$ $-4 > z$ 
9	$2(5 + n) < 6$ $10 + 2n < 6$ $-10 \quad -10$ $\frac{2n}{2} < \frac{-4}{2}$ $n < -2$  	$-3(d + 2) < -3$ $-3d - 6 < -3$ $+6 \quad +6$ $\frac{-3d}{-3} < \frac{3}{-3}$ $d > -1$ 

10	$-3b + 9 - 11b < 65$	$2(5x - 4) \leq 8(x + 1)$
	$-14b + 9 < 65$ $-9 \quad -9$ $\frac{-14b}{-14} < \frac{56}{-14}$ $b > -4$  	$10x - 8 \leq 8x + 8$ $-8x \quad -8x$ $2x - 8 \leq 8$ $+8 \quad +8$ $\frac{2x}{2} \leq \frac{16}{2}$ $x \leq 8$