Bellwork Alg 2A Thursday, October 6, 2016

1. Solve. $|x+7.3|-2 \le 48$

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

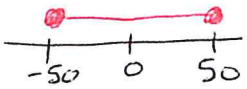
3. Solve. $5(2x-4)+8-3x > x-6+3(2x-8)$

4. Simplify. $\frac{3}{7}b(28b-42)+6b-2(5b^2-6b+5)-9+4b$

Bellwork Alg 2A Thursday, October 6, 2016 **Answers**

1. Solve. $|x+7.3|-2 \le 48$

$+2 \quad +2$



$|x+7.3| \le 50$

Less than 50 from zero

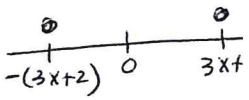
$-50 \le x+7.3 \le 50$

$-7.3 \quad -7.3 \quad -7.3$

$\boxed{-57.3 \le x \le 42.7}$

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

exactly $3x+2$ from zero



$2x-1 = -(3x+2)$

$2x-1 = -3x-2$

$+3x \quad +3x$

$5x-1 = -2$

$+1 \quad +1$

$\frac{5x}{5} = \frac{-1}{5}$

$\boxed{x = -1/5}$

$2x-1 = 3x+2$

$-2x \quad -2x$

$-1 = x+2$

$-2 \quad -2$

$\boxed{x = -3}$

extraneous solution

3. Solve. $5(2x-4)+8-3x > x-6+3(2x-8)$

$10x-20+8-3x > x-6+6x-24$

$7x-12 > 7x-30$

$-7x \quad -7x$

$-12 > -30$

this is true

ALL Real #'s

4. Simplify. $\frac{3}{7}b(28b-42)+6b-2(5b^2-6b+5)-9+4b$

$12b^2-18b+6b-10b^2+12b+10-9+4b$

$= \boxed{2b^2+4b-19}$