

ALGEBRA 1

Name _____
QUIZ 122007

1. Solve each inequality.

a. $2x - (x + 3) > 7$

b. $4x + 5 \geq 9x - 2$

c. $-7x + 6 + 8x < 4 \cdot 3$

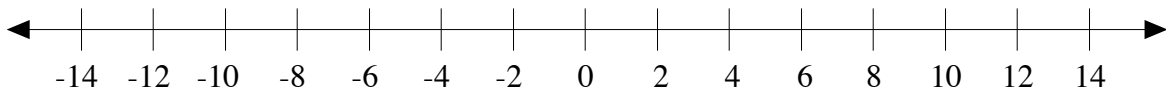
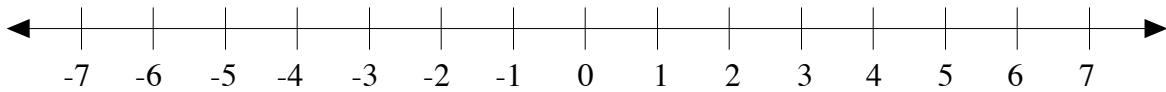
d. $5x - 4x > 3(2x - 4) - 6x$

e. $-5x + 3 \leq 13$

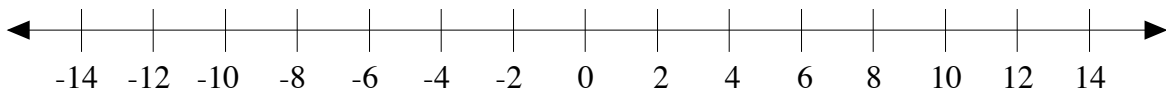
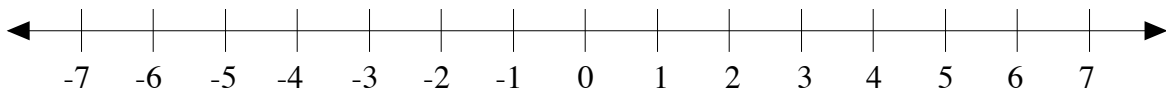
2. Solve each conjunction and graph. Be sure that the solution is clearly stated. Use the format below showing the transformation into a conjunction.

$$x > 4 \text{ and } x \geq 2 \quad \underline{x > 4 \wedge x \geq 2}$$

a. $8x - 12 > 4$ and $2x \geq 18$ _____



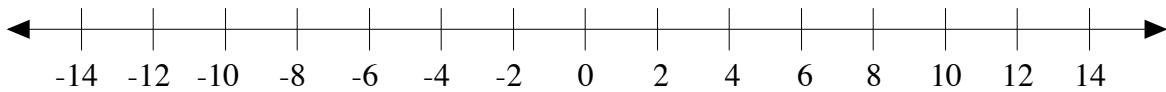
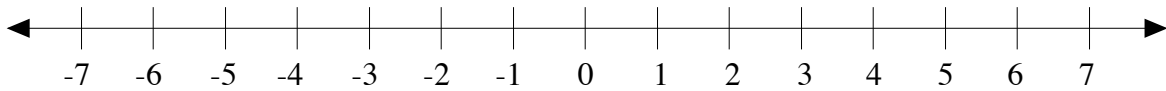
b. $4x - 3 \geq x$ and $2x + 6 < 18$ _____



3. Solve each disjunction and graph. Be sure that the solution is clearly stated.
Use the format below showing the transformation into a conjunction.

$$x > 4 \text{ or } x \geq 2 \quad \underline{x > 4 \vee x \geq 2}$$

a. $2x + 5 > 17$ or $x + 2 \leq 10$ _____



b. $x - 6 \leq -6$ or $3x - 5 < 10$ _____

