

Algebra 1 Bellwork Thursday, November 19, 2015

1. Solve this inequality and graph the solution. Check your solution

$$9m + 21 - 12m + 3 < -6m + 24$$

3. Solve this inequality.

$$4R + 3 - 6(R - 2) > 5 + R - 11 - 3R$$

4. Solve this inequality.

$$9 + \frac{4P-7}{3} \leq 14$$

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1. Solve this inequality and graph the solution. Check your solution

$$9m + 21 - 12m + 3 < -6m + 24$$

$$\begin{array}{rcl} -3m + 24 & < & -6m + 24 \\ +6m & & +6m \end{array}$$

$$\begin{array}{rcl} 3m + 24 & < & 24 \\ -24 & & -24 \end{array}$$

$$\frac{3m}{3} < \frac{0}{3}$$

$$m < 0$$

3. Solve this inequality.

$$4R + 3 - 6(R - 2) > 5 + R - 11 - 3R$$

$$4R + 3 - 6R + 12 > 5 + R - 11 - 3R$$

$$\begin{array}{rcl} -2R + 15 & > & -2R - 6 \\ +2R & & +2R \end{array}$$

$$15 > -6$$

THIS IS TRUE
SO THE
SOLUTION
IS:

ALL REAL #'S

4. Solve this inequality.

$$\begin{array}{rcl} 9 + \frac{4P-7}{3} & \leq & 14 \\ -9 & & -9 \end{array}$$

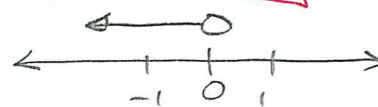
$$3 \cdot \frac{4P-7}{3} \leq 5 \cdot 3$$

$$\begin{array}{rcl} 4P - 7 & \leq & 15 \\ +7 & & +7 \end{array}$$

$$\frac{4P}{4} \leq \frac{22}{4}$$

$$P \leq \frac{11}{2} \text{ or } 5.5$$

Answers



CHECK STARTING POINT:

$$9(0) + 21 - 12(0) + 3 = -6(0) + 24$$

$$21 + 3 = 24$$

$$24 = 24 \checkmark$$

CHECK DIRECTION:

check any # to the left
of zero: TEST m = -

$$9(-1) + 21 - 12(-1) + 3 < -6(-1) + 24$$

$$-9 + 21 + 12 + 3 < 6 + 24$$

$$27 < 30 \checkmark$$