Algebra 1 Bellwork Tuesday, November 24, 2015

6th hr

Graph each compound inequality on a number line.

1. $C \geq 2$ and $C \leq 9$

2. $W \leq 1$ or $W > 99$

Solve each compound inequality and graph the solution.

3. $6 - 4x > 30$ *or* $\frac{4}{3}x - 5 > 31$

Sol:

Graph:

4. $3m - 1 \geq 29$ *and* $8 - \frac{m}{2} \geq -12$

Sol:

Graph:

5. $25 > 7 - 4c \geq 13$

Sol:

Graph:

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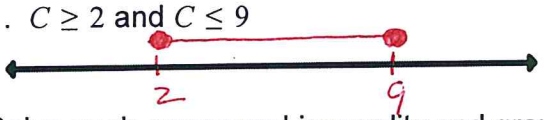
Answers

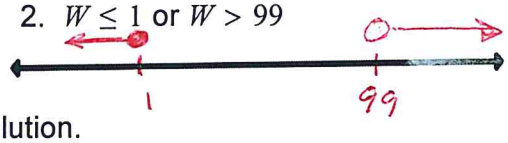
6th hr

Graph each compound inequality on a number line.

1. $C \geq 2$ and $C \leq 9$



2. $W \leq 1$ or $W > 99$



Solve each compound inequality and graph the solution.

3. $6 - 4x > 30$ *or* $\frac{4}{3}x - 5 > 31$

$-6 \quad -6 \qquad +5 \quad +5$

$\frac{-4x}{-4} > \frac{24}{-4} \qquad \frac{3}{4} \cdot \frac{4}{3}x > 36 \cdot \frac{3}{4}$

$x < -6 \quad$ or $\quad x > 27$

Sol: $x < -6$ or $x > 27$

Graph:

4. $3m - 1 \geq 29$ *and* $8 - \frac{m}{2} \geq -12$

$+1 \quad +1 \qquad -8 \quad -8$

$\frac{3m}{3} \geq \frac{30}{3} \qquad (-2)\left(-\frac{m}{2}\right) \geq (20)(-2)$

$m \geq 10 \quad$ and $\quad m \leq 40$

Sol: $m \geq 10$ and $m \leq 40 \longrightarrow 10 \leq m \leq 40$

Graph:

5. $25 > 7 - 4c \geq 13$

$-7 \quad -7 \quad -7$

$\frac{18}{-4} > \frac{-4c}{-4} > \frac{6}{-4} \longrightarrow -4.5 < c < -1.5$

Sol: $-4.5 < c < -1.5 \longrightarrow c > -4.5$ and $c < -1.5$

Graph: