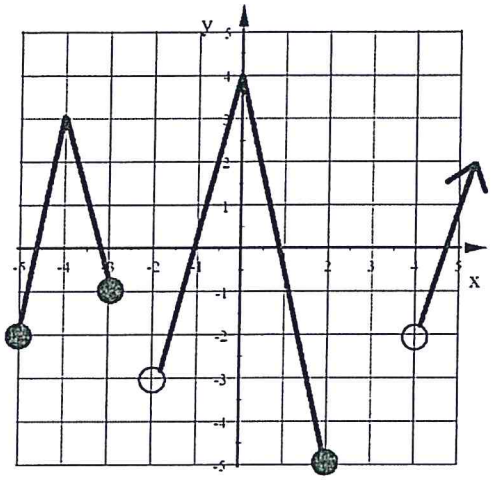
Algebra 2 Bellwork Wednesday, September 16, 2015

1. For the graph below use inequalities to state the Domain, Range, Intervals of Increasing, and Intervals of Decreasing.

Domain: Range: Inc: Dec:



Solve each compound in equality. State the solution as a single in equality or statement if possible.

2. $3w + 1 < 14$ *OR* $2w - 5 \leq 24$

3. $6 - 2c \geq 14$ *OR* $10c > 25$

4. $2k > 12$ *AND* $9 + 5k > 44$

5. $-13 \leq 3 - 2m \leq -41$

6. $R > -6$ *OR* $R < 12$

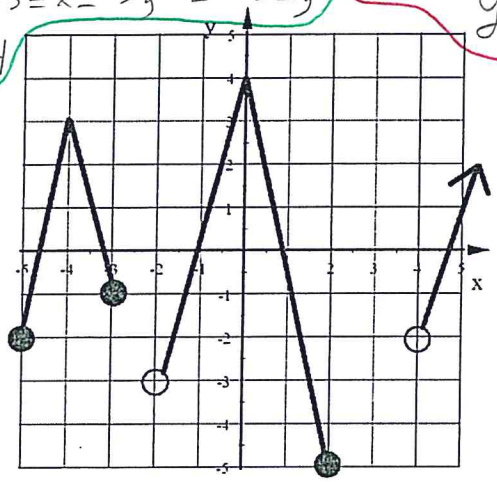
7. $G \geq -12$ *AND* $G \leq -1$

Algebra 2 Bellwork Wednesday, September 16, 2015 Answers

1. For the graph below use inequalities to state the Domain, Range, Intervals of Increasing, and Intervals of Decreasing.

Domain: $-5 \le x \le -3$, $-2 < x \le 2$, $x > 4$

Range: $y \ge -5$



Inc: $-5 < x < -4$; $-2 < x < 0$; $x > 4$

Dec: $-4 < x < -3$; $0 < x < 2$

Solve each compound in equality. State the solution as a single in equality or statement if possible.

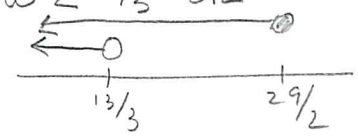
2. $3w + 1 < 14$ *OR* $2w - 5 \le 24$

$-1 \quad -1 \qquad +5 \quad +5$

$3w < 13 \qquad 2w \le 29$

$w < \frac{13}{3}$ OR $w \le \frac{29}{2}$

$w \le \frac{29}{2}$

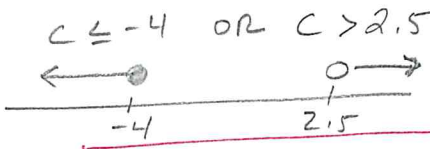


3. $6 - 2c \ge 14$ *OR* $\frac{10c}{10} > \frac{25}{10}$

$-6 \quad -6$

$-2c \ge 8$

$c \le -4$ OR $c > 2.5$



$c \le -4$ OR $c > 2.5$

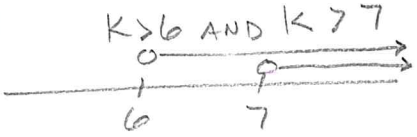
4. $\frac{2k}{2} > \frac{12}{2}$ *AND* $9 + 5k > 44$

$-9 \quad -9$

$k > 6 \qquad \frac{5k}{5} > \frac{35}{5}$

$k > 7$

$K > 6$ AND $K > 7$



5. $-13 \le 3 - 2m \le -41$

$-3 \quad -3 \quad -3$

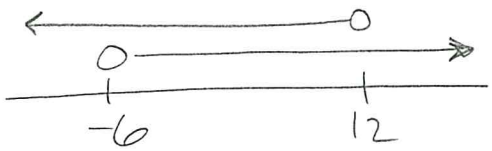
$\frac{-16}{-2} \le \frac{-2m}{-2} \le \frac{-44}{-2}$

$8 \ge m \ge 22$

NO SOL

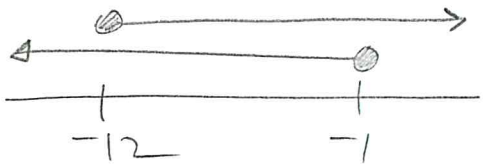
$m \le 8$ AND $m \ge 22$

6. $R > -6$ *OR* $R < 12$



R

7. $G \ge -12$ *AND* $G \le -1$



$-12 \le G \le -1$