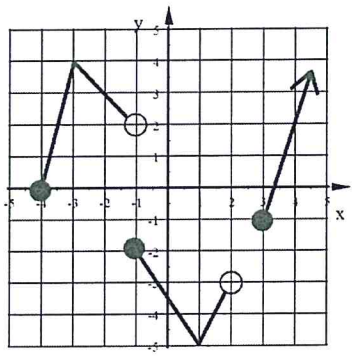
Bellwork Honors Alg 2 Friday, September 16, 2016

1. Solve this equation for A. State restrictions on the variables. $\frac{K-AT}{W}+\frac{M+C}{R}=AG$

2. The perimeter of a rectangle is 58 inches. The width is five more than three times the length. Write and solve an equation to find the dimensions of this rectangle.



3. Use the graph shown at the right.

a) Use inequalities to state Domain & Range.

Domain Range

b) Use inequalities to state intervals of Inc and Dec.

Increasing Decreasing

Bellwork Honors Alg 2 Friday, September 16, 2016 ANSWERS

1. Solve this equation for A. State restrictions on the variables. $\frac{K-AT}{W}+\frac{M+C}{R}=AG$

$WR\left(\frac{K-AT}{W}+\frac{M+C}{R}\right)=AG(WR)$

$R(K-AT)+W(M+C)=AGWR$

$RK-ART+WM+WC=AGWR$

$RK+WM+WC=AGWR+ART$

$RK+WM+WC=A(GWR+RT)$

$A=\frac{RK+WM+WC}{GWR+RT}$ $W,R\neq 0$ $GWR+RT\neq 0$

2. The perimeter of a rectangle is 58 inches. The width is five more than three times the length. Write and solve an equation to find the dimensions of this rectangle.

$2W+2L=58$

$W=3L+5$

$2(3L+5)+2L=58$

$6L+10+2L=58$

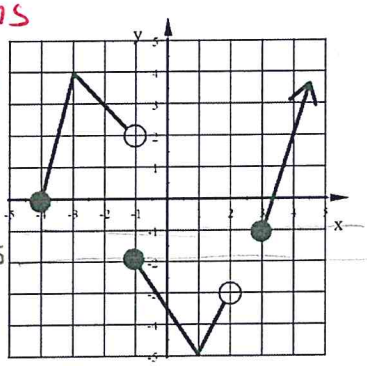
$8L+10=58$

$8L=48$ $L=6$

$W=3(6)+5$

$W=23$

dimensions 6 x 23



3. Use the graph shown at the right.

a) Use inequalities to state Domain & Range.

Domain $-4\leq x<2,\ x\geq 3$

Range $-5\leq y\leq -2$ $y\geq -1$

b) Use inequalities to state intervals of Inc and Dec.

Increasing $-4<x<-3$ $1<x<2$ $x>3$

Decreasing $-3<x<-1$ $-1<x<1$