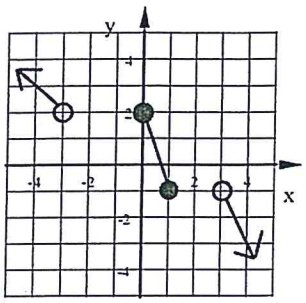
Bellwork Alg 2A Wednesday, October 12, 2016

1. State the domain and the range of this graph:



Domain:

Range:

2. Write the equation of the line that passes through this pair of points in both Point-Slope and Slope-Intercept Forms. $(6,8)$ & $(12,-2)$

Point-Slope Form

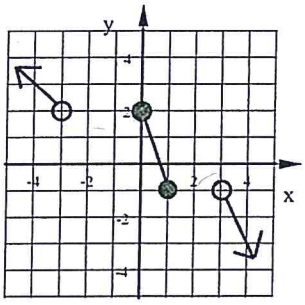
Slope-Intercept Form

3. Find the slope of the line that passes through these two points. Give your answer in reduced form.

$(\frac{7}{3},\frac{5}{6})$ & $(\frac{5}{9},\frac{3}{2})$

Bellwork Alg 2A Wednesday, October 12, 2016 ANSWERS

1. State the domain and the range of this graph:



Domain: $x < -3,\ 0 \le x \le 1,\ x > 3$

Range: ALL REAL #'s

2. Write the equation of the line that passes through this pair of points in both Point-Slope and Slope-Intercept Forms. $(6,8)$ & $(12,-2)$

Point-Slope Form

$y-8=-\frac{5}{3}(x-6)$

or

$y+2=-\frac{5}{3}(x-12)$

$m=\frac{8-(-2)}{6-12}=\frac{10}{-6}=-\frac{5}{3}$

Slope-Intercept Form

START WITH $y-8=-\frac{5}{3}(x-6)$

$y-8=-\frac{5}{3}x+10$

$+8 \qquad +8$

$y=-\frac{5}{3}x+18$

3. Find the slope of the line that passes through these two points. Give your answer in reduced form.

$(\frac{7}{3},\frac{5}{6})$ & $(\frac{5}{9},\frac{3}{2})$

$$\frac{\frac{5}{6}-\frac{3}{2}}{\frac{7}{3}-\frac{5}{9}}\cdot\frac{18}{18}=\frac{15-27}{42-10}=\frac{-12}{32}=\frac{-3}{8}$$