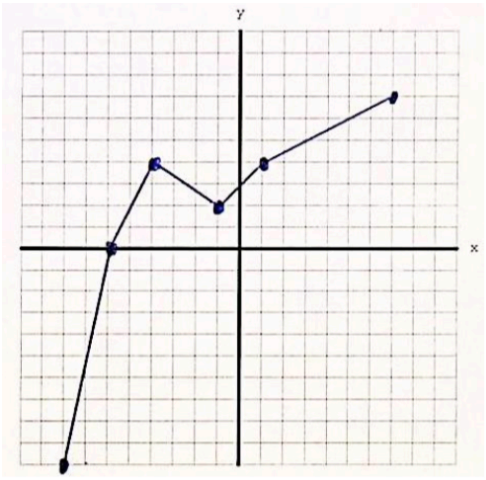
Algebra 2
Unit 4 WS1

Name:_____
Date:_____
Period:_____

1. Use the relation graphed to answer the following questions:

a. Is the relation a function? Explain



b. Is the relation one-to-one? Explain.

c. Sate the domain.

d. State the range.

2. Simplify

a. $\sqrt{2880}$

b. $\sqrt{-136}$

3. Given the following $(3x^3 - 15x^2 - 6x + 12) \div (x - 5)$

a) Divide.

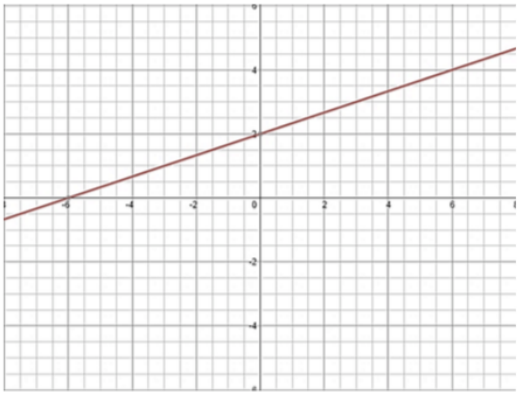
b) Is $(x - 5)$ a factor of the polynomial? Explain.

4. Write an equation for a rational function that would have: (think about what we learned in Unit3)

- vertical asymptote at x = -3
- hole at x = 2

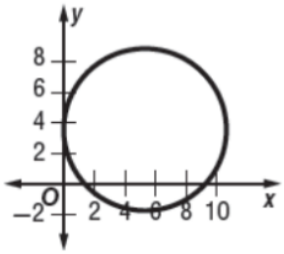
5. Write the equation of the **line** containing (4, -5) and (2, 3).

6. Write the equation of the line shown in the graph.



State the domain and range. Determine if the relation is a function and EXPLAIN. Then determine whether or not it is one-to-one.

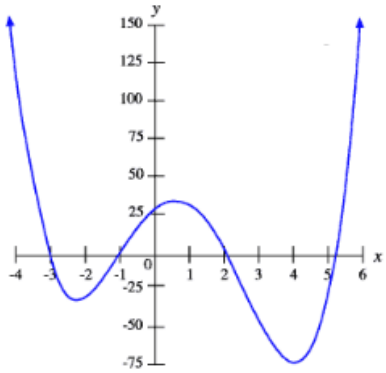
7.



8.

x	y
–2	–1
–2	1
–1	0
1	0
2	1

9.



10. Simplify $\frac{n}{n-3}+\frac{2n+2}{n^2-2n-3}$

11. Simplify $\frac{x^2-9}{4x-24}\div\frac{6x-18}{8x+16}$