

Name: _____

Date: _____

1. Factor each of the following fully.

a. $6x^2y^2 - 3x^6y + 4x^2y$

b. $x^2 + x - 30$

c. $2x^2 + 6x + 4$

d. $5x^2 - 13x - 6$

2. Expand each of the following.

a. $(x - 4)(x + 1)$

b. $(3x - 14)(-5x + 2)$

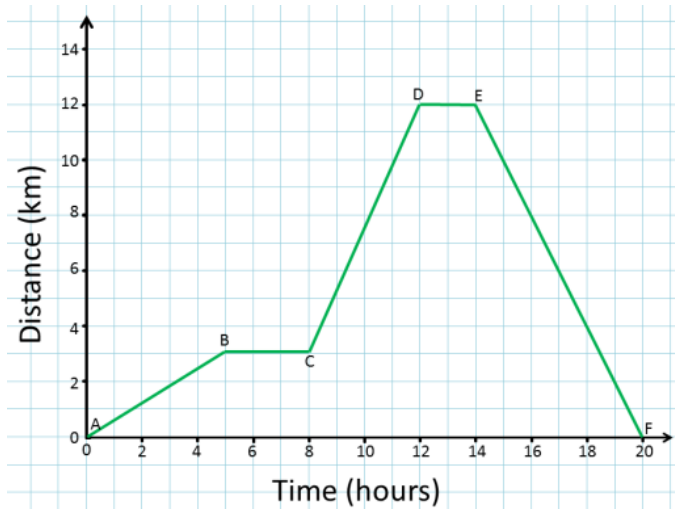
3. Use exponent rules to simplify. Show all work.

a. $\frac{(a^3b^2)(a^{-2}b^3)}{(a^2b)}$

b. $\left(\frac{a^{-2}b^8}{a^2b^3}\right)^{-2}$

4. Describe a real-life situation that fits this graph.

AB:



BC:

CD:

DE:

EF:

5. Complete the table of values using the equation, then graph the data.

$$f(x) = -2x + 3$$

x	y
-1	
0	
2	
4	



CHAPTER 6 – LINEAR FUNCTIONS

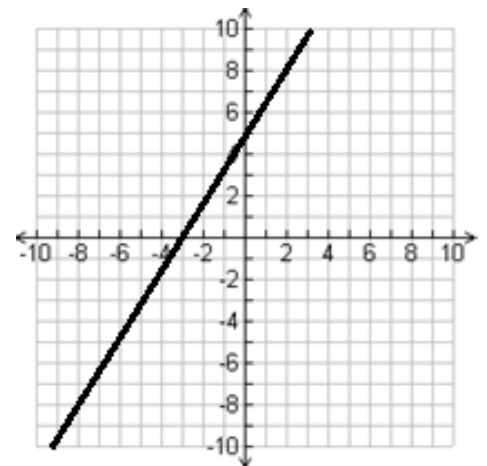
6. Identify the following components of the graph provided...

a. X-Intercept:

b. Slope:

c. Y-Intercept:

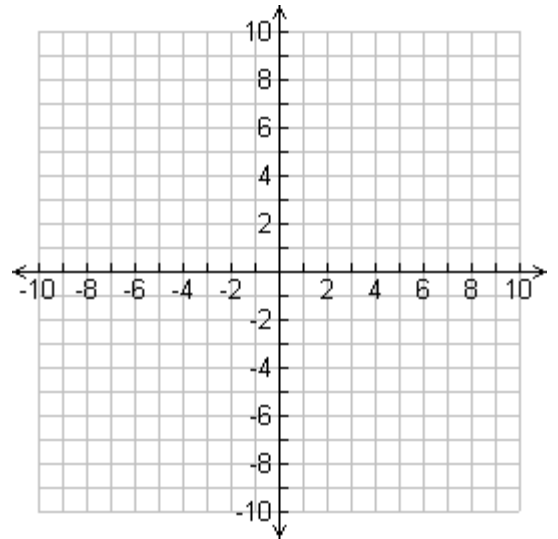
d. Equation of the line:



7. *Solve this system of equations by graphing.*

Equation A:
 $y = \frac{3}{2}x - 7$

Equation B:
 $y + 3 = -2(x - 5)$



Solution: _____

8. *Solve this system of equations using elimination or substitution.*

$$3x - 2y = 6$$

$$2x + 4y = 20$$

Solution: _____