Review   Name:_____
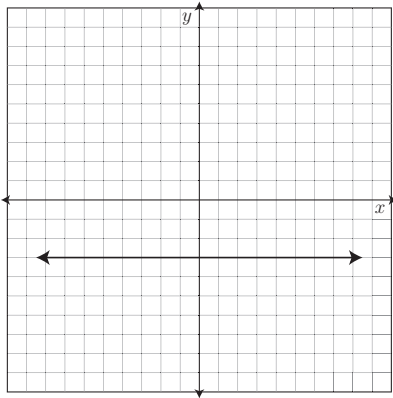
> Show all relevant work!
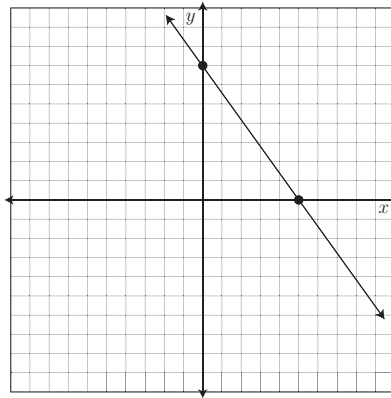
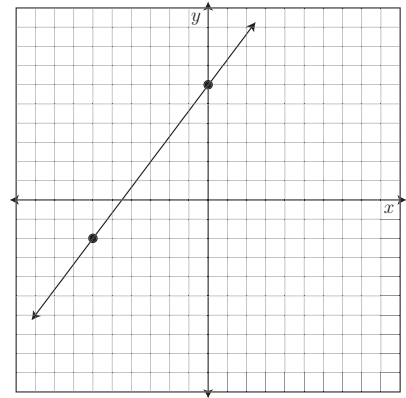1. Write the equations of the lines graphed below.

(a)

(b)

(c)

Eqn:_____   Eqn:_____   Eqn:_____

2. Graph the line perpendicular to #1(b) above that contains the point $(-2, 3)$.

3. The table for a linear equation is started below.
   (a) Fill in the rest of the table.

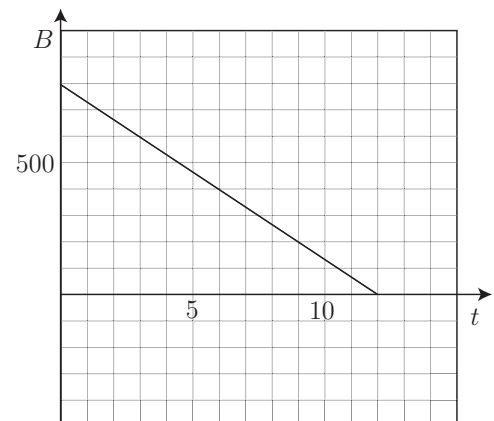 | x | | | 6 | 9 | |
   |-----|--|--|---|---|--|
   | y | | | 9 | 4 | |

   (b) Write the equation of the line for this table.

4. Complete this table for the line through $(-2, 5)$ that is perpendicular to the line in #3.

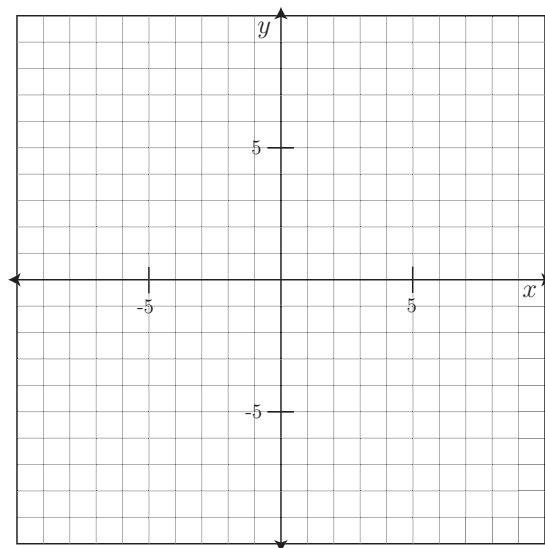 | x | | | -2 | | |
   |-----|--|--|------|--|--|
   | y | | | 5 | | |

5. The balance of Clarence's bank account is graphed below. If B measures his balance in dollars and t is time in months, answer the following questions.

   (a) How fast is Clarence spending money?

   (b) Write an equation for the balance of Clarence's account over time.

   (c) What is the B intercept and what does it tell you?

   (d) What is the t intercept and what does it tell you?

   (e) What happens after the t intercept (give a contextual interpretation).

1

6. Graph the equation $y = -\dfrac{5}{3}x + 2$.

7. Juan owns a propane-gas barbecue grill with a tank that holds 5 gallons of propane. He always sets the temperature at $350°$F, which uses 0.125 gallons of propane per hour. Let g be the number of gallons of propane that remain in the tank after t hours of cooking since the tank was filled. Write an equation for g in terms of t.

8. My garbage company charges \$12 to pick up one can of garbage and \$28 to pick up 3 cans.
   (a) What is the company's per can charge?

   (b) Since the charge for one can is \$12, there must be an additional "service" charge the company adds just for showing up. What is this amount?

   (c) Write a linear formula for the cost, C, of having n cans of garbage picked up.