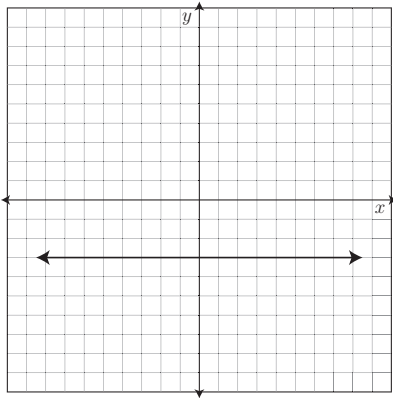


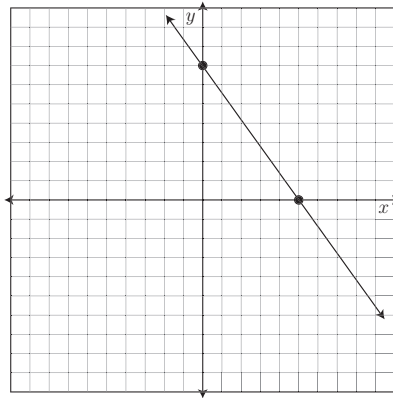
Show all relevant work!

1. Write the equations of the lines graphed below.

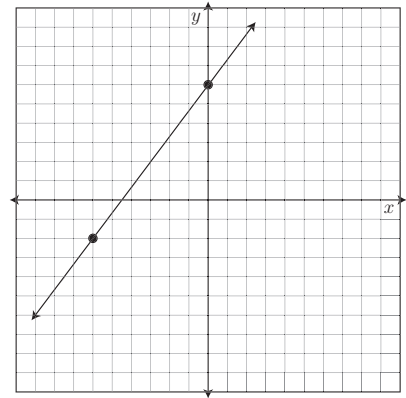
(a)



(b)



(c)



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 | |

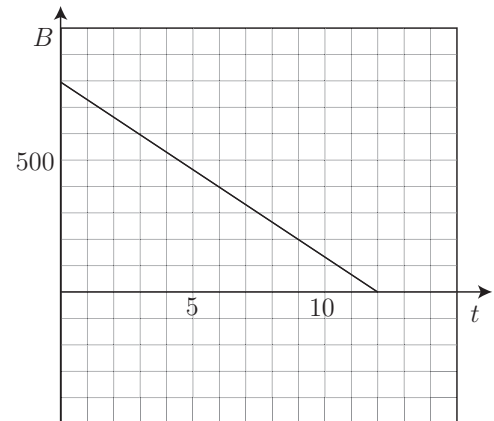
(b) Write the equation of the line for this table.

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).

6. 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 .

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

(c) What is the C intercept and what does it mean in this context?