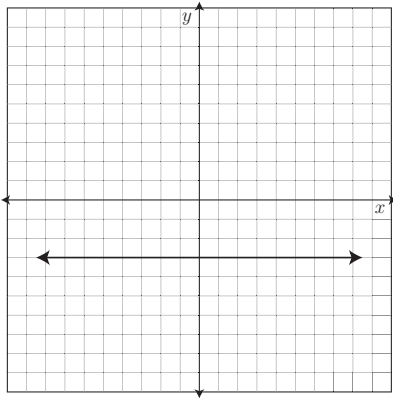


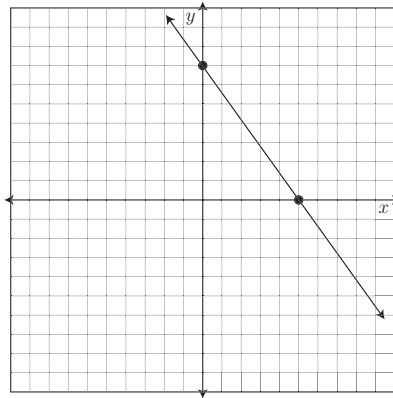
Show all relevant work!

1. Write the equations of the lines graphed below.

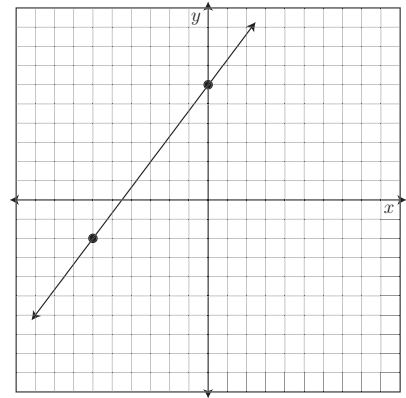
(a)



(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	

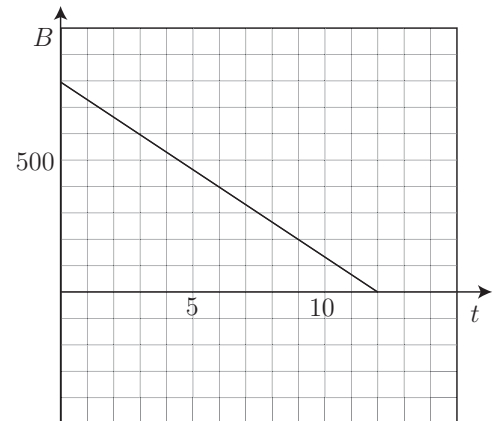
(b) Write the equation of the line for this table.

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  $350^{\circ}\text{F}$ , 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?