### 5.5 The $y$-intercept of a line

1. What is the y-intercept of the line?

2. What is the $y$-intercept of the line?

3. What is the $y$-intercept of the line $y=\frac{1}{2} x-5$ ?
4. What is the $y$-intercept of the line $y=-2 x$
5. What is the $y$ - intercept of the line $y=-10$
6. The line models the depth of the water in a small fountain during a severe rainstorm. What is the $y$ intercept? What does the y-intercept represent?

7. Each question on a 50-point test is worth 5 points. Partial answers receive partial credit. The line models this situation.
a. What is the $y$-intercept of the line?
b. What does the $y$-intercept of the line represent?
c. What is the slope of the line?

8. A cell phone company charges a $\$ 25$ startup fee and then $\$ 0.45$ for every minute used. Write an equation that represents this situation.
a. Equation:
b. What is the y-intercept?
c. What does the y-intercept represent?

Find the slope from the pair of points or line.
9. $(-4,-2)(-3,-4)$
10. $(5,-5)(5,5)$
11. $(0,2)(4,5)$
12. $(1,-5)(-2,5)$

Identify the slope and the y-intercept.
16. $y=2 x$


