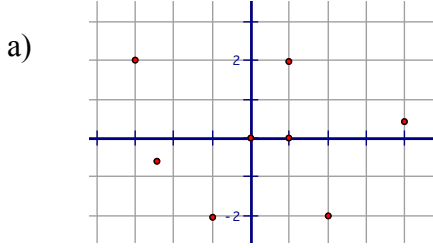


Chapter 2 Review

Name _____

1. Is the relation a function? Explain.



b) $\{(5, 0), (8, 3), (1, 3), (-5, 2), (3, 8)\}$

c) Find the domain and range for part b.

2. If $f(x) = -2x + 8$ and $g(x) = 3x$, find the following:

a) $f(-3)$

b) $g(4) + f(2)$

3. Write an equation of a line through $(-3, -9)$ that is parallel to $y = 3x + 7$. Write in each form.

point-slope form: _____

slope-intercept form: _____

standard form: _____

4. Write an equation of a line through $(8, 3)$ and perpendicular to $y = -2x + 3$. Write in each form.

point-slope form: _____

slope-intercept form: _____

standard form: _____

5. Alexandra has a college savings account. After 3 years she has \$2569 in the account. After 10 years she has \$7630.

a) Write an equation to model the amount of money in the account as a function of time.

b) How much money will Alexandra have after 18 years?

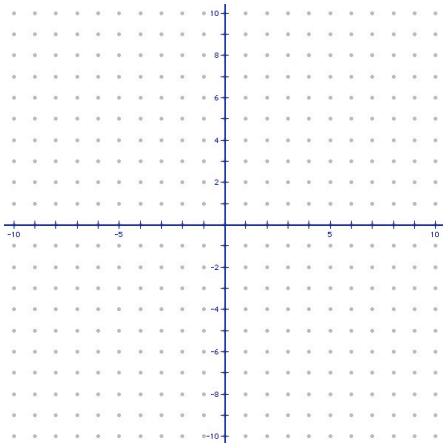
6. At the beginning of week 7 Mrs. Stutheit has 250 pencils. At week 10, she has 220 pencils.

a) Write an equation to model the number of pencils Mrs. Stutheit has as a function of time.

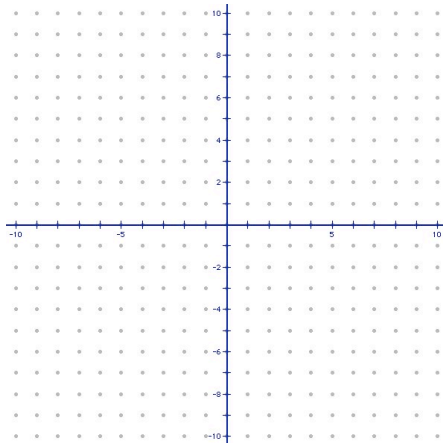
b) How many pencils will Mrs. Stutheit have after 18 weeks?

Graph each of the following.

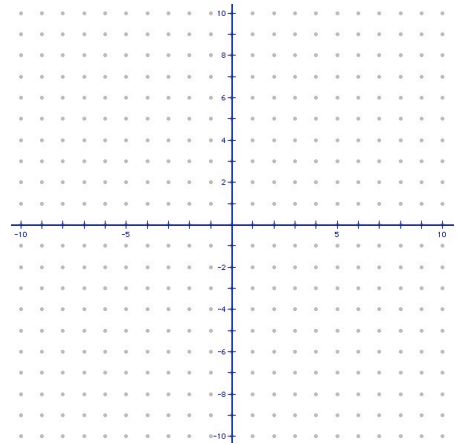
7. $3x + y = 6$



8. $-1 + y > 3x$

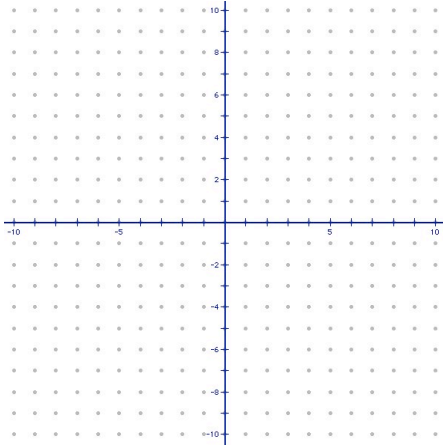


9. $y \leq 2$

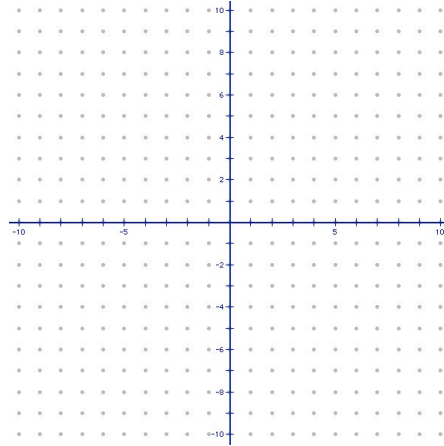


Graph each of the following.

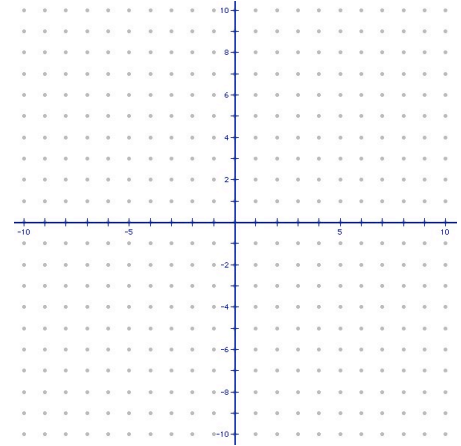
10. $y = |x + 2| - 3$



11. $y \leq -2|x - 3| + 1$



12. $y > |x| - 6$



13. Balcony tickets to a concert cost \$50 and main floor tickets cost \$60. The arena wants to have at least \$40,000 in ticket sales.

a) Write an inequality relating the balcony and main floor tickets to the ticket sales.

b) Graph the inequality.



c) If the arena sold 2000 balcony tickets, how many main floor tickets would it have to sell in order to make the goal?