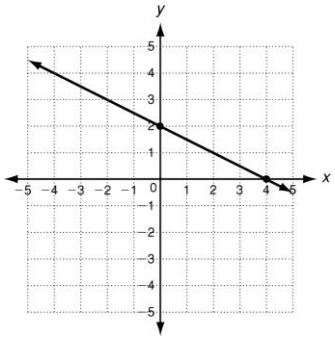
Name _____ Date _____ Class _____

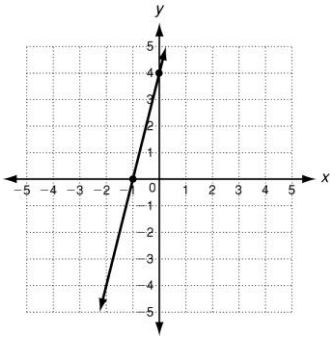
# Standard Form HW

**Find the *x*- and *y*-intercepts.**

1. 

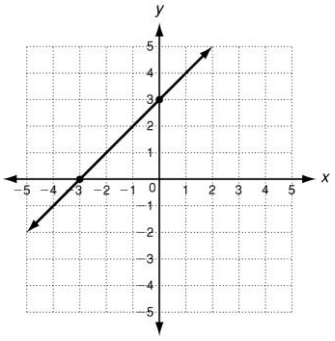
_____

_____

2. 

_____

_____

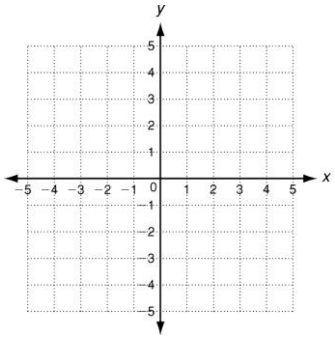
3. 

_____

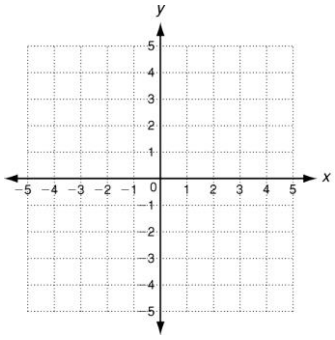
_____

**Graph each equation from standard form.**

4. $3x + 2y = -6$



5. $x - 4y = 4$



6. At a fair, hamburgers sell for \$3.00 each and hot dogs sell for \$1.50 each. The equation $3x + 1.5y = 30$ describes the number of hamburgers and hot dogs a family can buy with \$30.

   a. Find the intercepts and graph the function.

   _____

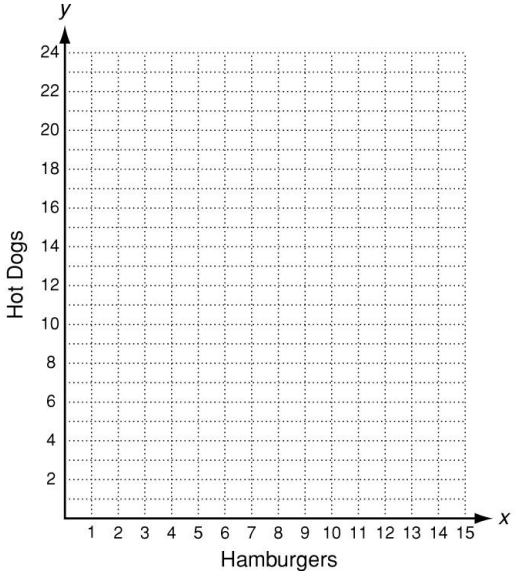
   b. What does each intercept represent?

   _____

   _____

   _____

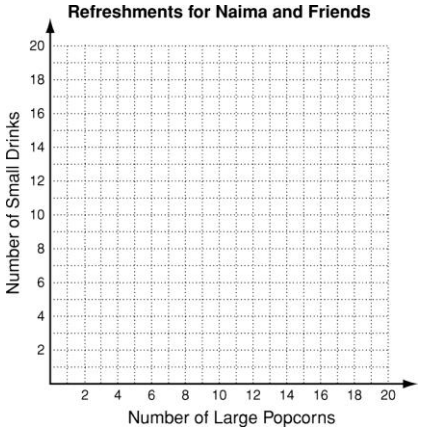
   _____



**Write the correct answer.**

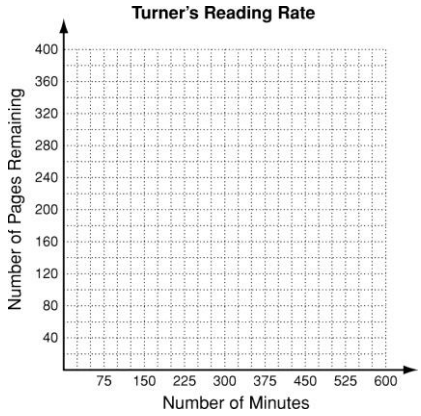
1. Naima has $40 to spend on refreshments for herself and her friends at the movie theater. The equation $5x + 2y = 40$ describes the number of large popcorns $x$ and small drinks $y$ she can buy. Graph this function and find its intercepts.

_____




2. Turner is reading a 400-page book. He reads 4 pages every 5 minutes. The number of pages Turner has left to read after $x$ minutes is represented by the function $f(x) = 400 - \frac{4}{5}x$. Graph this function and find its intercepts.

_____




**The graph shows the distance of an elevator at Chimney Rock, North Carolina, from its destination as a function of time. Use the graph to answer questions 3–6. Select the best answer.**

3. What is the $x$-intercept of this function?

   A 0 C 258

   B 30 D 300

4. What does the $x$-intercept represent?

   F the total distance the elevator travels

   G the number of seconds that have passed for any given distance

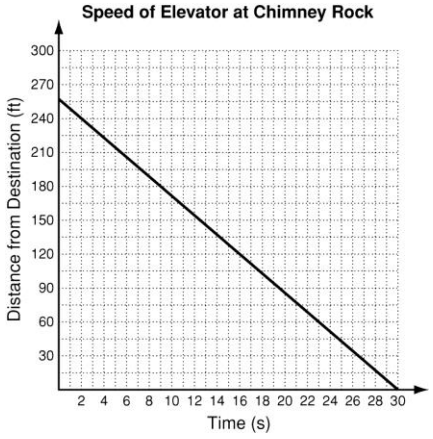
   H the number of seconds it takes the elevator to reach its destination

   J the distance that the elevator has traveled at any given time

5. What is the $y$-intercept for this function?

   A 0 C 258

   B 30 D 300




6. What does the $y$-intercept represent?

   F the total distance the elevator travels

   G the number of seconds that have passed for any given distance

   H the number of seconds it takes the elevator to reach its destination

   J the distance that the elevator has traveled at any given time