Name: _____

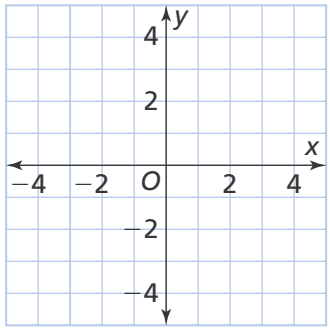
5-2 Additional Practice

Scan for Multimedia

In 1 and 2, graph each system of equations to determine the solution.

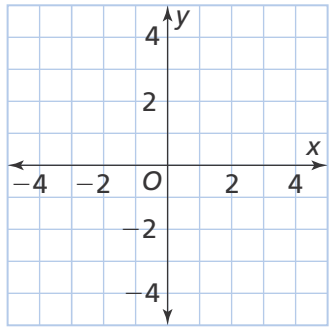
1. $y = \frac{1}{2}x + 3$

$2y = x + 6$



2. $y = \frac{2}{3}x + 1$

$y = \frac{4}{3}x - 1$

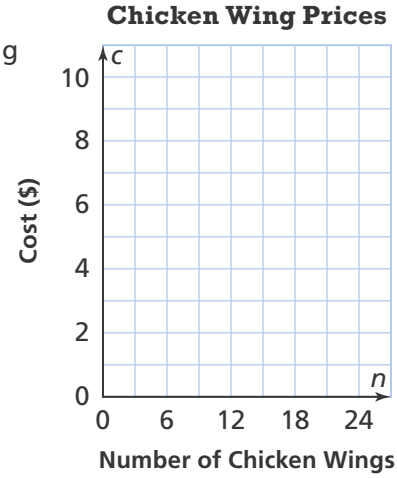


3. The cost of endless chicken wings and sauce at Restaurant X is \$10. The cost of chicken wings at Restaurant Z is \$0.50 per wing plus a one-time \$1.50 charge for sauce. The total cost, c, of n chicken wings can be represented by a system of equations.

a. Write the system of equations that could be used to find out the cost of n chicken wings at each restaurant.

b. Graph the system of equations.

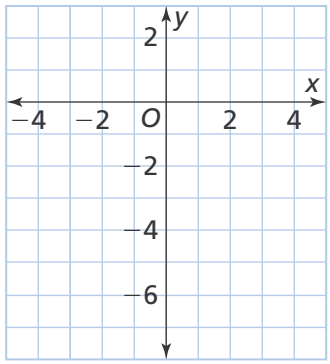
c. When will the total cost of the same number of chicken wings be the same at both restaurants? Explain.



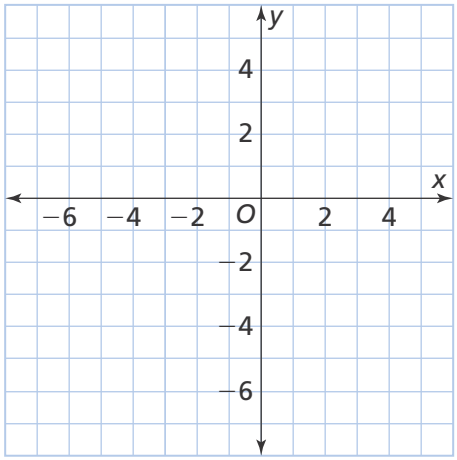
4. Graph the system of equations and determine the solution.

$6x - 3y = 3$

$4x - 2y = 8$



5. Graph the system of equations, and then estimate the solution.



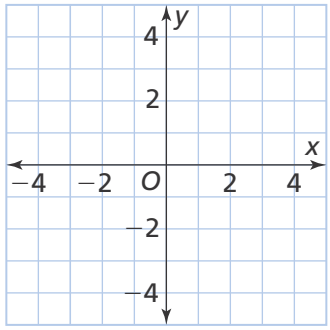
$y = 2x + 4$

$y = -x - 3.5$

In 6 and 7, graph and determine the solution of the system of equations.

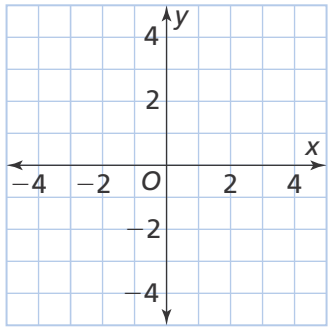
6. $y = 6x - 3$

$\frac{1}{3}y = 2x - 1$



7. $y = -\frac{3}{4}x + 2$

$4y = -3x + 12$

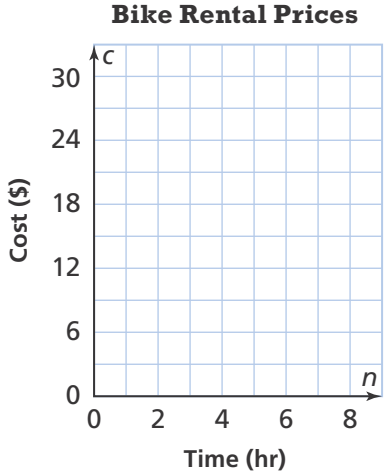


8. Higher Order Thinking At Bike Shop X it costs $2.75 per hour plus a $3.00 deposit to rent a bike. At Bike Shop Z it costs $1.75 per hour plus a $7.00 deposit to rent a bike.

a. Write the system of equations that could be used to find c, the total cost for renting a bike for n hours at each shop.

b. Graph the system of equations.

c. When would it cost less to rent a bike from Bike Shop X? Explain.



Assessment Practice

9. Tickets to a play cost $12.75 per ticket plus a $12.00 fee per order online. At the box office, the cost is $15.75 per ticket.

PART A

Write a system of equations that represents the total cost, c, of purchasing tickets for n people.

PART B

Graph the system. What is the solution of the system and what does it represent?