

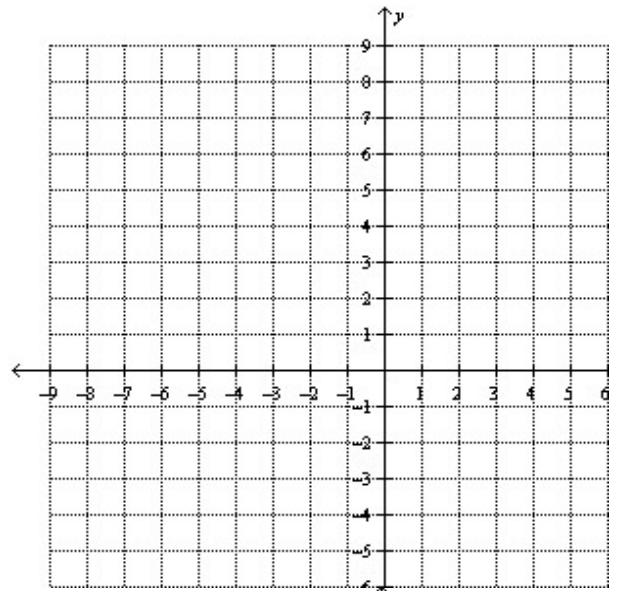
# Graphing Systems of Linear Equations

Accelerated 7<sup>th</sup> Grade Math

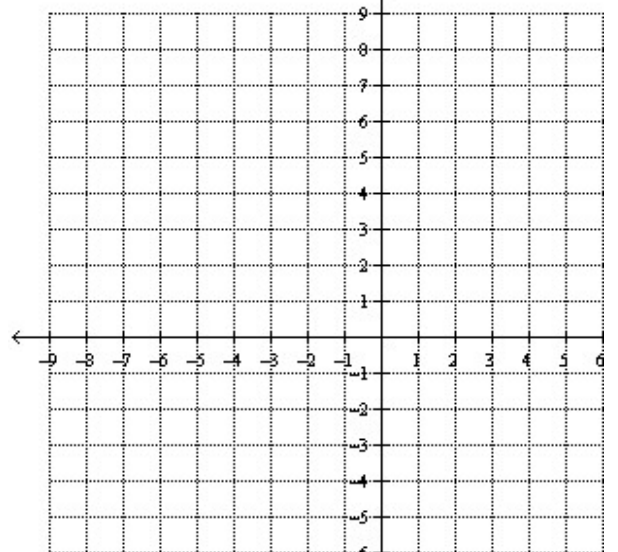
Name: \_\_\_\_\_

Solve each of the following systems by graphing.

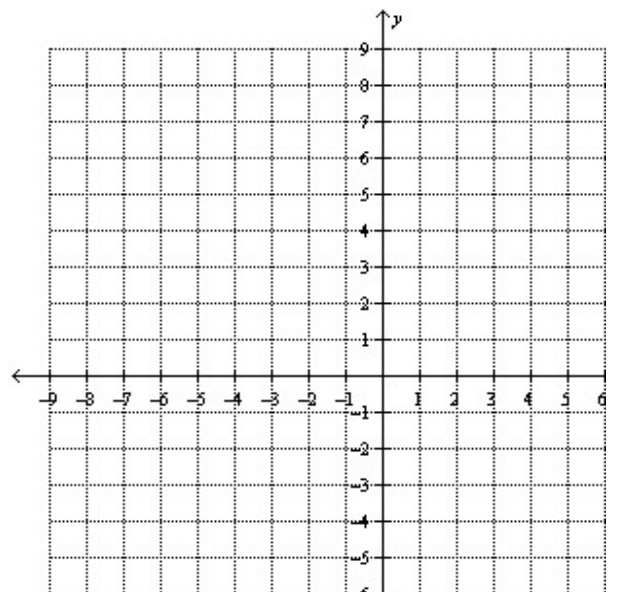
1.  $x - y = 3$   
 $2x + y = 3$



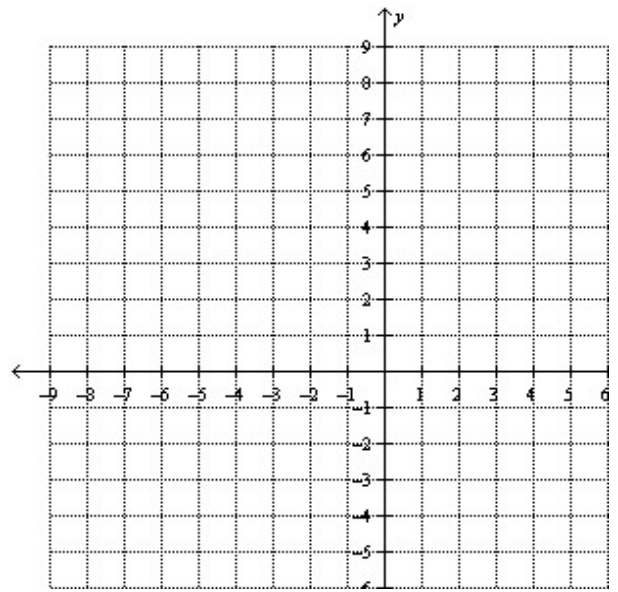
2.  $5x + 2y = 10$   
 $5x - 2y = 10$



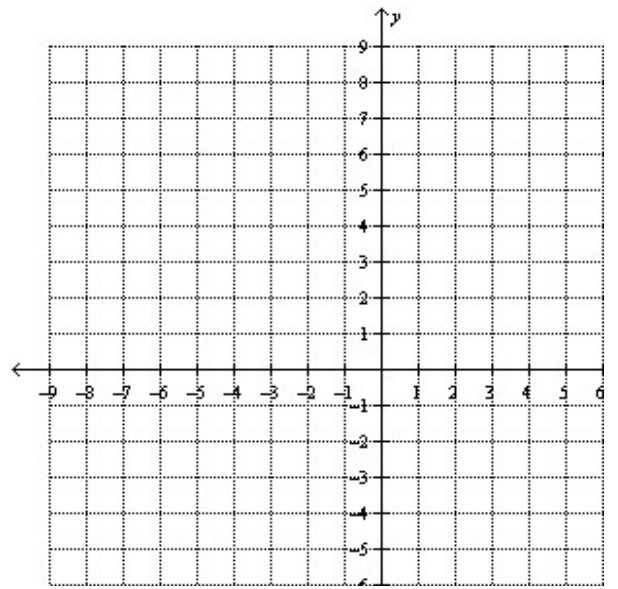
3.  $x + y = -8$   
 $3x + y = -6$



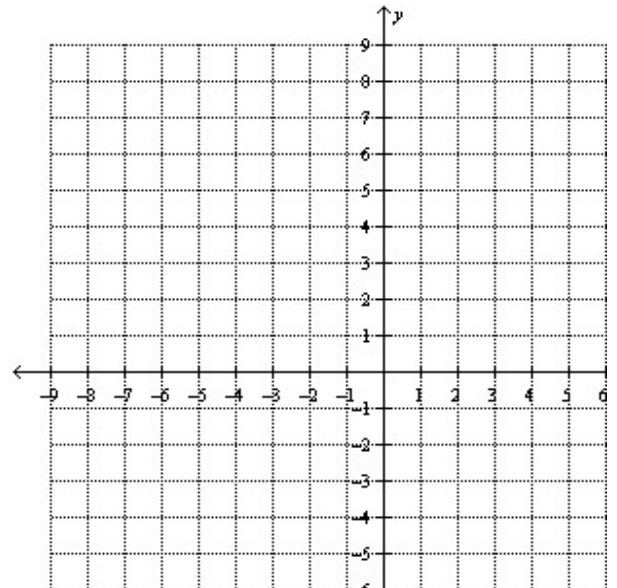
4.  $y = -2x + 1$   
 $2x + y = -1$



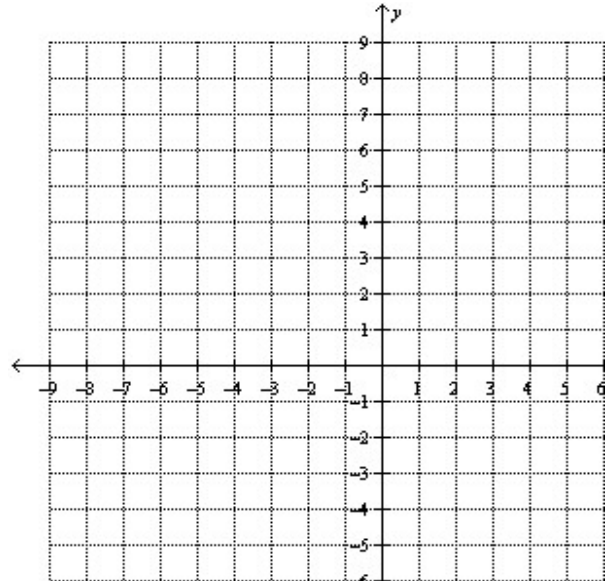
5.  $x + y = 3$   
 $2x = 10 - 2y$



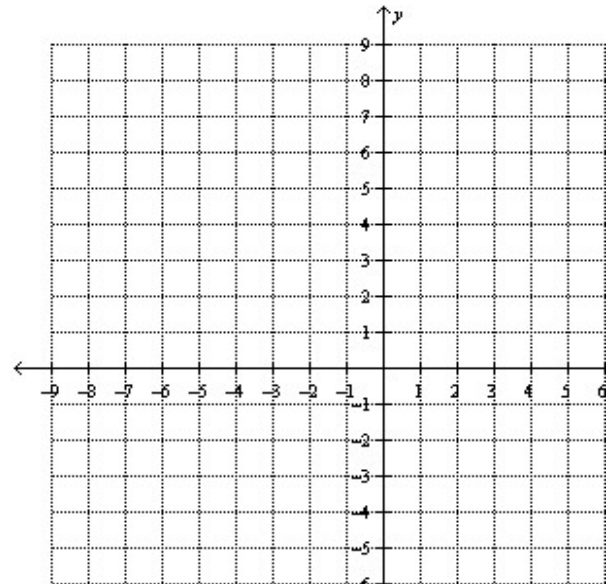
6.  $y = 2x - 4$   
 $2x - y = 4$



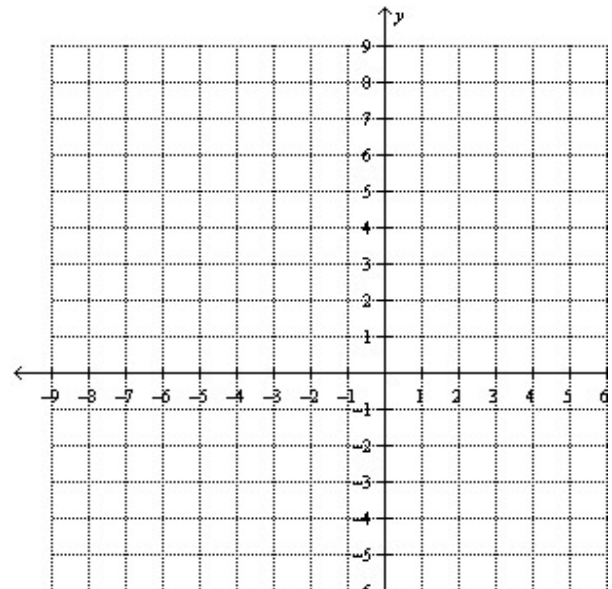
7.  $-6x + 6y = 6$   
 $4x + 4y = -12$



8.  $y = x + 5$   
 $8x + 4y = 32$



9.  $-x + y = -4$   
 $y = 3x$



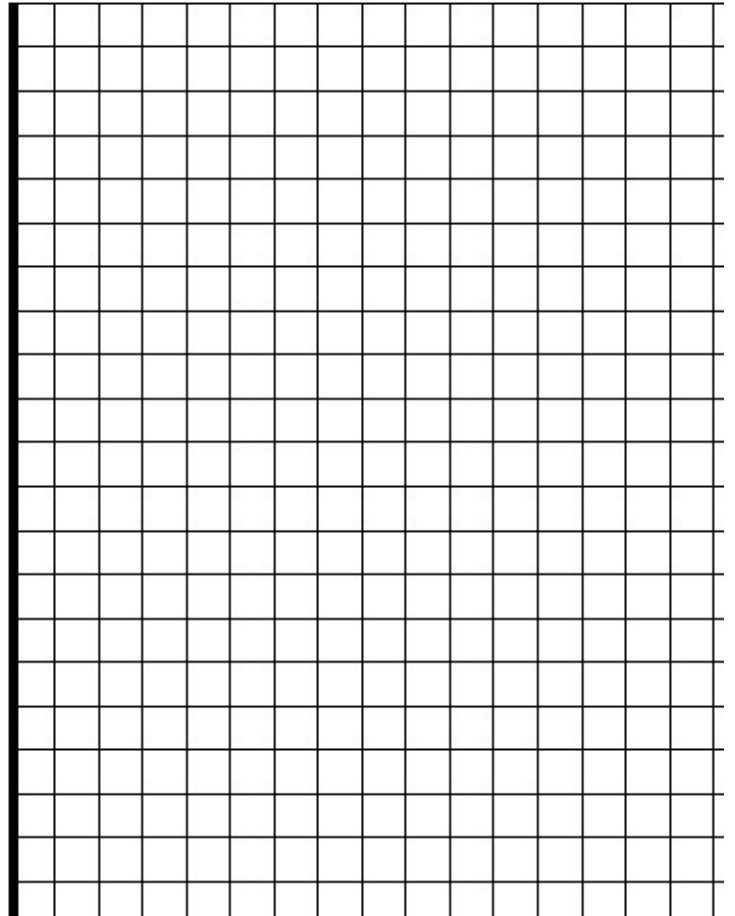
10. Corey and Rob are brothers and are going to race. Corey runs at a pace of 5 meters per second. Rob runs at a rate of 7 meters per second. Since Corey is slower, he is going to get a 6 meter head start. How long will it take Rob to catch up to Corey?

- a. Write an equation for each brother.

Corey:

Rob:

- b. Graph and solve the system.



11. Barbie and Ken are going bungee jumping. Barbie is bungee jumping with a cord that has rubber bands that each stretch 8 cm and she is 22 cm long. Ken is bungee jumping with a cord that has rubber bands that each stretch 6 cm and he is 26 cm long. What number of rubber bands would cause Barbie and Ken jump the same distance?

- a. Write an equation for each doll.

Barbie:

Ken:

- b. Graph and solve the system.

