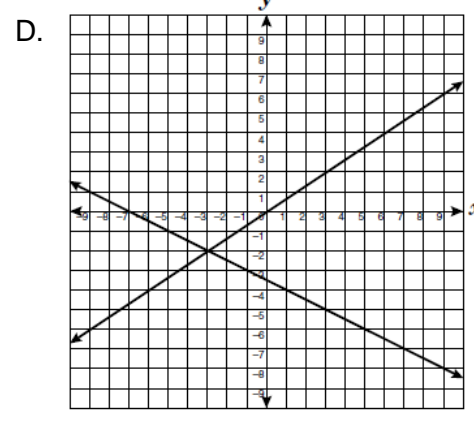
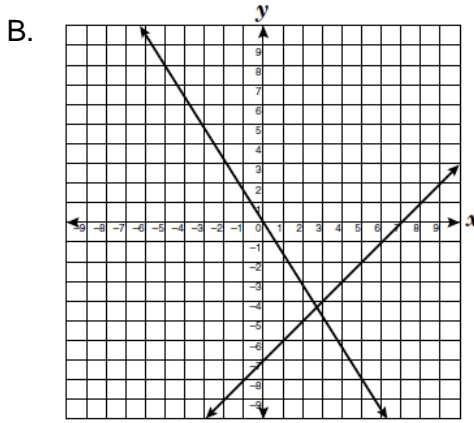
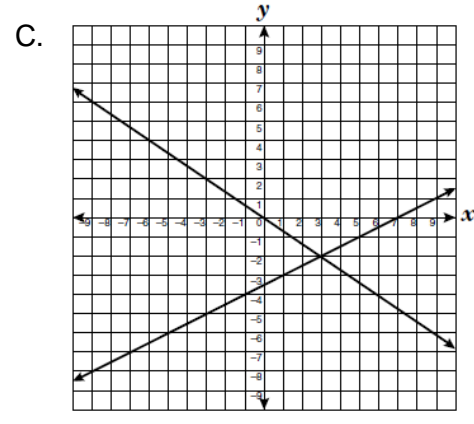
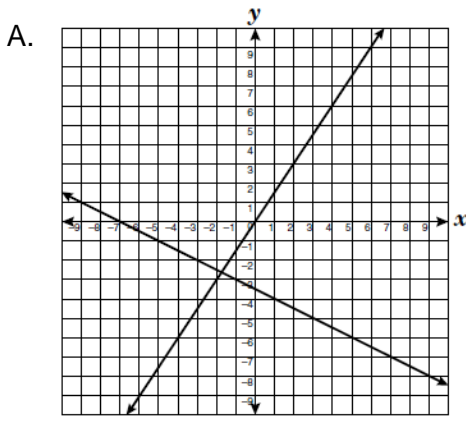


LINEAR EQUATIONS AND INEQUALITIES

1. Which graph best represents a solution to this system of equations?

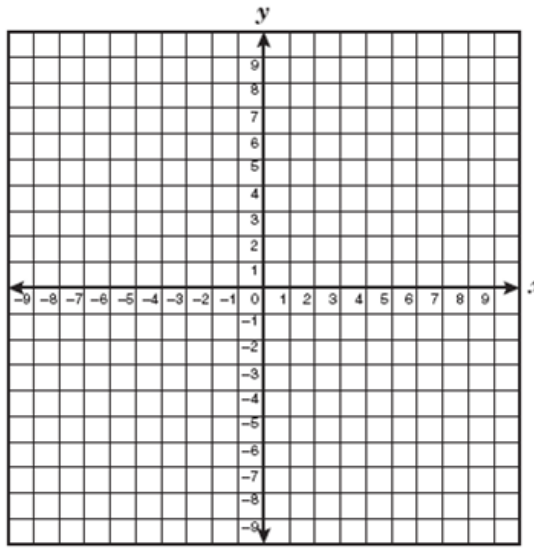
$$2x - 3y = 0$$

$$x + 2y = -7$$



2. If the system of linear equations $2x + y = 1$ and $y = -\frac{1}{2}x + 1$ are graphed on the same coordinate grid, which of the following is the solution to the system of linear equations?

- A. (2, 0)
- B. (0, 2)
- C. (0.5, 0)
- D. Not Here



3. The length of a rectangle is equal to triple the width. Which system of equations can be used to find the dimensions of the rectangle if the perimeter is 85 centimeters?

F. $l = w + 3$
 $2(l + w) = 85$

H. $l = 3w$
 $2(l + w) = 85$

G. $l = 3w$
 $2l + 6w = 85$

J. $l = w + 3$
 $2l + 6w = 85$

4. An online digital game and movie company rents video games for \$4.99 and movies for \$2.99. In one hour, the company rented a total of 35 games and movies. If the total rental income for this hour was \$144.65, not including tax, which of the following statements is a reasonable conclusion?

F. The total rental income for movies in this hour was \$99.80, not including tax.

G. There were more movies than video games rented in this hour.

H. There were more video games than movies rented in this hour.

J. The total rental income for video games in this hour was \$74.85, not including tax.

5. In 2004 a married couple could have calculated their estimated income tax, t , for that year using the equation $t = 0.25c - 6525$, in which c represents their combined taxable income. If a married couple had a combined taxable income between \$60,000 and \$64,000, which of the following is a reasonable amount for their income tax?

F. \$6,525

G. \$8,975

H. \$13,869

J. \$15,500