

Name: _____

Date: _____

Practice 5.1

Solve each system of linear equations by making tables of values. Each variable x is a positive integer less than 6.

① $2x + y = 5$
 $x - y = -2$

② $x + 2y = 4$
 $x = 2y$

③ $3x + 2y = 10$
 $5x - 2y = 6$

④ $x - 2y = -5$
 $x = y$

⑤ $2y - x = -2$
 $x + y = 2$

⑥ $2x + y = 3$
 $x + y = 1$

⑦ $x + 2y = 1$
 $x - 2y = 5$

⑧ $2x - y = 5$
 $2x + y = -1$

⑨ $2y + x = -1$
 $x + y = 1$

Solve by making a table of values. The values x and y are integers.

- ⑩ A shop sells a party hat at x dollars and a mask at y dollars. On a particular morning, 10 hats and 20 masks were sold for \$30. In the afternoon, 8 hats and 10 masks were sold for \$18. The related system of linear equations is:

$$10x + 20y = 30$$

$$8x + 10y = 18$$

Solve the system of linear equations. Then find the cost of each hat and each mask.

- ⑪ Alicia is x years old and her cousin is y years old. Alicia is 2 times as old as her cousin. Three years later, their combined age will be 27 years. The related system of linear equations is:

$$x = 2y$$

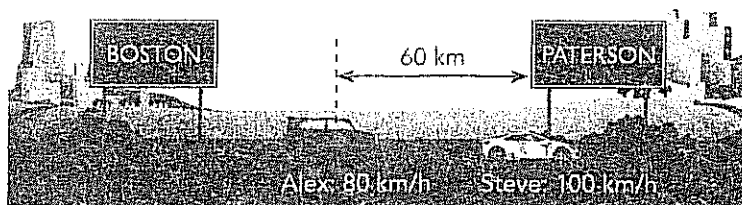
$$x + y = 21$$

Solve the system of linear equations. Then find Alicia's age and her cousin's age.

- ⑫ Steve and Alex start driving at the same time from Boston to Paterson. The journey is d kilometers. Steve drives at 100 kilometers per hour and takes t hours to complete the journey. Alex, who drives at 80 kilometers per hour, is 60 kilometers away from Paterson when Steve reaches Paterson. The related system of linear equations is:

$$100t = d$$

$$80t = d - 60$$



Solve the system of linear equations by making tables of values. Then find the distance between Boston and Paterson.