Name: _____   Date: _____

Section 1.3 Practice Master

1. Which two equations are equivalent?
   A $y = 2x + 6$
   B $2y = x + 12$
   C $3y = x + 2$
   D $2y = 4x + 12$

2. Write two equivalent equations for each.
   a) $y = -4x + 3$
   b) $3x + 2y = 5$
   c) $2x + 5y - 6 = 0$
   d) $y = 6x - 3$

3. The perimeter of a rectangle is 30 cm. Write an equation to represent this situation. Then, write an equivalent linear equation.

4. The value of the quarters and nickels in Michael's coin jar is $1.65. Write an equation to represent this situation. Then, write an equivalent linear equation.

5. A linear system is given.
   $x - y = 7$ ①
   $3x + 2y = -5$ ②
   Explain why the following is an equivalent linear system.
   $3x - 3y = 21$ ③
   $12x + 8y = -20$ ④

6. The following linear system is shown on the graph:
   $y = x + 6$ ①
   $y = 2x - 3$ ②
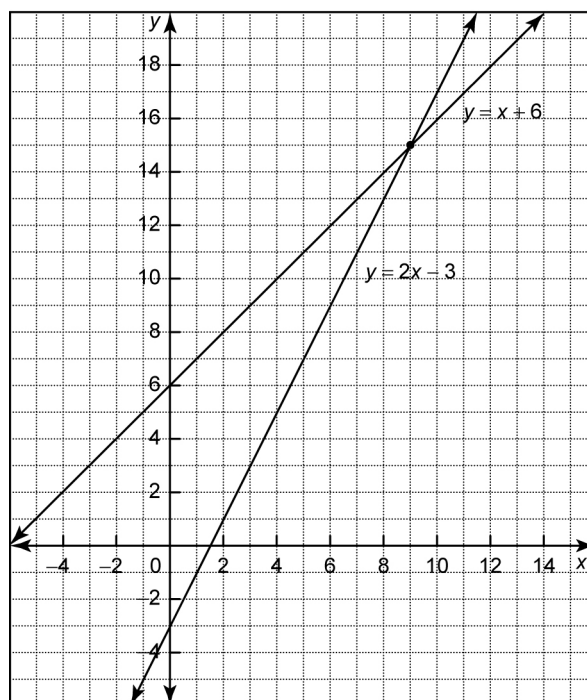
a) Use a graph to show that the following is an equivalent linear system.
   $2y = 3x + 3$ ③
   $0 = x - 9$ ④
b) How is equation ③ obtained from equations ① and ②?
c) How is equation ④ obtained from equations ① and ②?