CC8   Name_____

Solve Systems Test Review Day 1

Date_____ Period____

Solve each system using the appropriate method for how the equations are setup. You must show all steps to receive full credit.
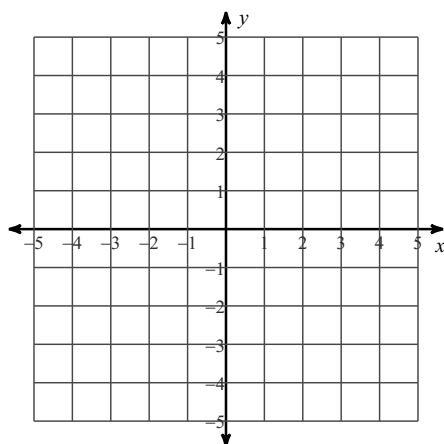
1) $-5x + 7y = -24$
   $x + 2y = -19$

2) $5x + 8y = -6$
   $-4x - 3y = 15$
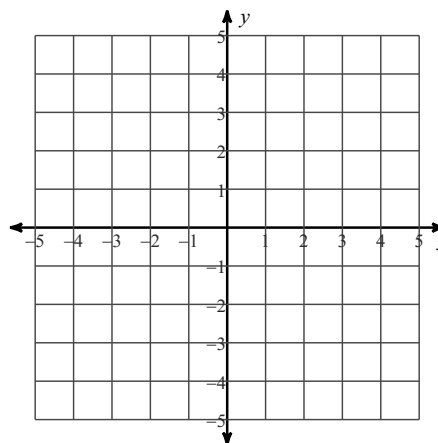
3) $4x - 3y = 17$
   $y = -2x + 1$

4) $2x - 3y = 8$
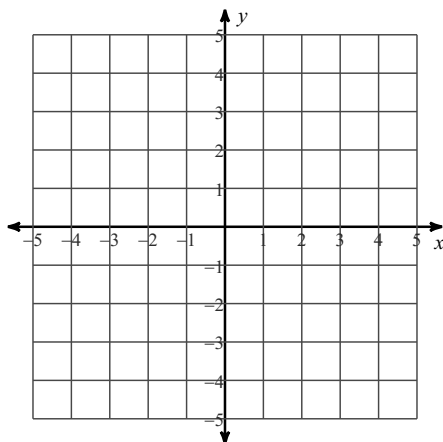 $-2x + 4y = -16$

Solve each system by graphing.

5) $y = -\dfrac{1}{2}x + 3$
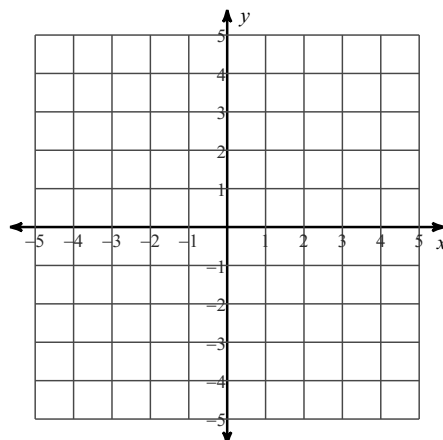
   $y = -\dfrac{3}{2}x + 1$

6) $y = -2x - 3$
   $y = 3x + 2$

7) $x - y = 2$
$\quad 12 - 3y = 15x$

8) $\dfrac{1}{2} = -x + \dfrac{1}{2}y$
$\quad 2y - x = -4$

For each problem below, write a system of equations and solve using the appropriate method. Don't forget to define your variables and answer the question.

9) Amy and Eugene are selling cheesecakes for a school fundraiser. Customers can buy New York style cheesecakes and chocolate marble cheesecakes. Amy sold 5 New York style cheesecakes and 14 chocolate marble cheesecakes for a total of $171. Eugene sold 2 New York style cheesecakes and 14 chocolate marble cheesecakes for a total of $144. What is the cost each of one New York style cheesecake and one chocolate marble cheesecake?

10) Ndiba's school is selling tickets to a fall musical. On the first day of ticket sales the school sold 8 adult tickets and 12 child tickets for a total of $208. The school took in $76 on the second day by selling 5 adult tickets and 3 child tickets. Find the price of an adult ticket and the price of a child ticket.

11) Yellowstone National Park is a popular field trip destination. This year the senior class at High School A and the senior class at High School B both planned trips there. The senior class at High School A rented and filled 9 vans and 13 buses with 314 students. High School B rented and filled 5 vans and 3 buses with 90 students. Each van and each bus carried the same number of students. Find the number of students in each van and in each bus.

-2-

Answers to Solve Systems Test Review Day 1

1) $(-5, -7)$ 2) $(-6, 3)$ 3) $(2, -3)$ 4) $(-8, -8)$

5) $(-2, 4)$ 6) $(-1, -1)$ 7) $(1, -1)$ 8) $(-2, -3)$

9) New York style cheesecake: $9, chocolate marble cheesecake: $9

10) adult ticket: $8, child ticket: $12   11) Van: 6, Bus: 20