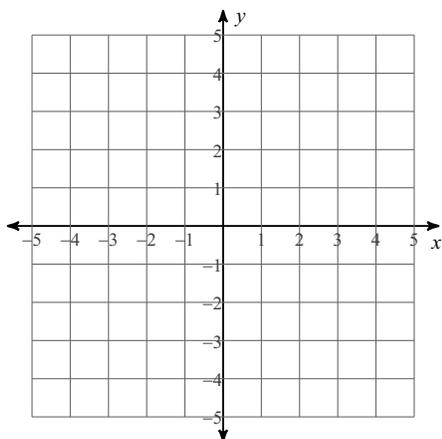


All Systems Review

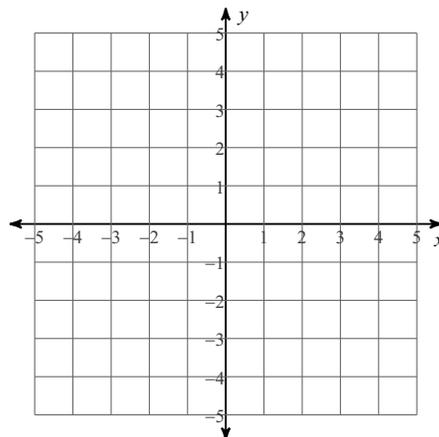
Solve each system by graphing.

1) $y = \frac{5}{3}x + 3$

$y = -\frac{2}{3}x - 4$



2) $x - 4y = -16$
 $7x + 4y = -16$



Solve each system using the appropriate method. Show all your work.

3) $y = 2x - 9$
 $-5x - 4y = 10$

4) $y = 6x - 2$
 $4x - y = 0$

5) $-3x - 3y = -15$
 $-2x - 12y = 20$

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

$$\begin{aligned} 7) \quad & -4x - 3y = 13 \\ & -7x - 5y = 21 \end{aligned}$$

$$\begin{aligned} 8) \quad & -5x - 8y = 19 \\ & y = -3 \end{aligned}$$

9) The sum of two numbers is 20. Their difference is 4. Find the numbers.

10) Shreya and Lisa each improved their yards by planting grass sod and ivy. They bought their supplies from the same store. Shreya spent \$96 on 10 ft² of grass sod and 6 pots of ivy. Lisa spent \$122 on 4 ft² of grass sod and 10 pots of ivy. What is the cost of one ft² of grass sod and the cost of one pot of ivy?

11) Julia and Krystal are selling cheesecakes for a school fundraiser. Customers can buy New York style cheesecakes and chocolate marble cheesecakes. Julia sold 8 New York style cheesecakes and 5 chocolate marble cheesecakes for a total of \$134. Krystal sold 9 New York style cheesecakes and 6 chocolate marble cheesecakes for a total of \$156. Find the cost each of one New York style cheesecake and one chocolate marble cheesecake.

12) The water 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 2 vans and 10 buses with 498 students. High School B rented and filled 4 vans and 9 buses with 468 students. Each van and each bus carried the same number of students. How many students can a van carry? How many students can a bus carry?

Answers to All Systems Review (ID: 1)

- 1) $(-3, -2)$
- 2) $(-4, 3)$
- 3) $(2, -5)$
- 4) $(1, 4)$
- 5) $(8, -3)$
- 6) $(-2, 4)$
- 7) $(2, -7)$
- 8) $(1, -3)$
- 9) 8 and 12
- 10) ft² of grass sod: \$3, pot of ivy: \$11
- 11) New York style cheesecake: \$8, chocolate marble cheesecake: \$14
- 12) Van: 9, Bus: 48