

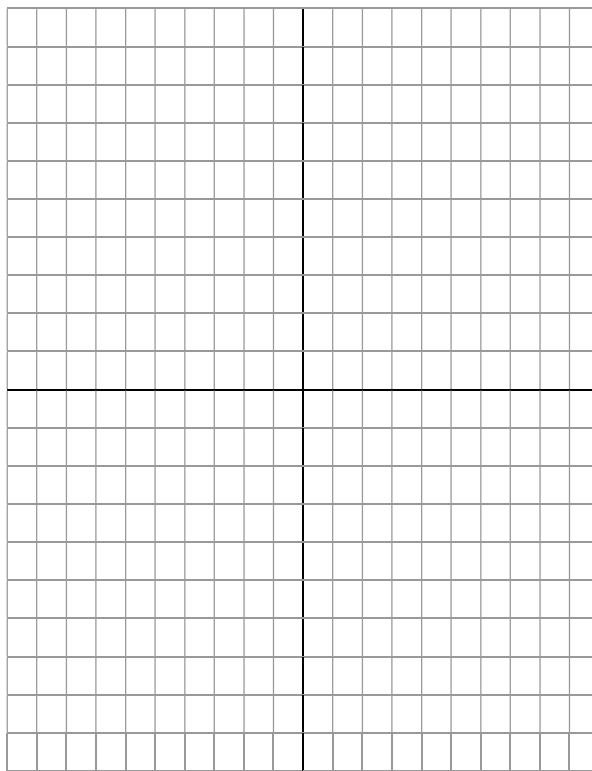
## Chapter 7 Practice Test

1. Find the intersection of these two lines by graphing them. Draw carefully.

Line 1:  $y = \frac{3}{4}x + 1$

Line 2:  $y = -\frac{1}{2}x + 6$

Point where they intersect: (\_\_\_\_, \_\_\_\_)



2. Determine if the systems are independent, dependent or inconsistent.

a.  $-x + 2y = 1$   
 $2x + 1 = 4y$

b.  $y = 3x - 1$   
 $y = -x - 5$

c.  $x + 2y = 3$   
 $4y = 6 - 2x$

Solve this equation by using substitution.

3.  $x + y = 8$   
 $3x + 2y = 22$

Solve this equation using elimination.

4.  $3x + 2y = 18$   
 $5x - 3y = 11$

Solve these using any method you prefer.

5       $x + y = 14$   
          $2x - 3y = -17$

6.       $x + 2y = 18$   
          $x + y = 14$

7. Home Depot sold 40 bags of lawn seed in one week. The total for the sales was \$263. Large bags of seed sell for \$8.50, and small bags sell for \$5.75. How many bags of each size sold that week?

8. Irene invested \$18,000. She invested part of it in Fund A which earns 8% interest per year and the rest in Fund B which earns 12% per year. She earned \$1900 in interest for the year. How much did Irene invest in each fund?

9. Ms. Brunsting needs a 19% solution of acid for a chemistry lab. She has one bottle of acid that is 40% and another bottle of acid that is 10%. How many milliliters of each acid does she mix to make 200 mL of 19% acid?