

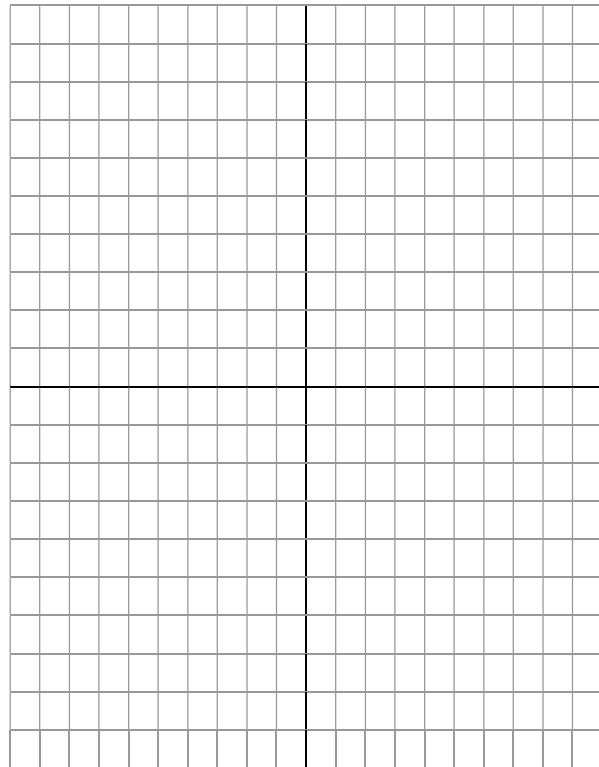
Chapter 7 Practice Test

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. $\begin{aligned} -x + 2y &= 1 \\ 2x + 1 &= 4y \end{aligned}$

b. $\begin{aligned} y &= 3x - 1 \\ y &= -x - 5 \end{aligned}$

c. $\begin{aligned} x + 2y &= 3 \\ 4y &= 6 - 2x \end{aligned}$

Solve this equation by using substitution.

3. $\begin{aligned} x + y &= 8 \\ 3x + 2y &= 22 \end{aligned}$

Solve this equation using elimination.

4. $\begin{aligned} 3x + 2y &= 18 \\ 5x - 3y &= 11 \end{aligned}$

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?