

Chapter 8 Practice Test

Name: _____

Time Start: _____ Finish: _____ Total Time = _____

Solve each system of equations.

_____ 1.
$$\begin{cases} y = 2x + 5 \\ x + y = 14 \end{cases}$$

_____ 2.
$$\begin{cases} y = -x + 5 \\ x + 2y = 14 \end{cases}$$

_____ 3.
$$\begin{cases} 4x + y = 41 \\ x - y = 9 \end{cases}$$

_____ 4.
$$\begin{cases} x = 5 - y \\ 2x = 2y + 6 \end{cases}$$

_____ 5.
$$\begin{cases} 5x + 3y = -13 \\ 4x - 2y = -6 \end{cases}$$

_____ 6.
$$\begin{cases} y = 2x - 1 \\ x - 3y = -2 \end{cases}$$

_____ 7.
$$\begin{cases} y = -3x - 1 \\ -4x - 2y = -2 \end{cases}$$

_____ 8.
$$\begin{cases} 9x + 2y = 10 \\ 2x + 5y = -16 \end{cases}$$

_____ 9.
$$\begin{cases} 3x + 2y = 11 \\ 6x + 4y = 7 \end{cases}$$

_____ 10.
$$\begin{cases} y = 2x - 5 \\ 4x - 2y = 10 \end{cases}$$

_____ 11. $\begin{cases} y = 2x + 5 \\ y = 3x + 6 \end{cases}$

_____ 12. $\begin{cases} 3x + 2y = 1 \\ x - y = -8 \end{cases}$

_____ 13. $\begin{cases} y = x - 3 \\ 2x - y = 8 \end{cases}$

_____ 14. $\begin{cases} x = 3 + y \\ 3x + y = -3 \end{cases}$

_____ 15. $\begin{cases} 9x + 4y = -1 \\ 5x - 3y = -11 \end{cases}$

_____ 16. $\begin{cases} y = 2x + 5 \\ y = 2x + 1 \end{cases}$

_____ 17. For \$10.80, you can get 3 pancakes and 3 pieces of bacon.
For 2 pancakes and 1 slice of bacon it costs \$5.80.
How much are they charging for each pancake and each slice of bacon?

_____ 18. A hotel has two packages that it offers. You can stay there for 3 days and get 2 massages for \$770 or you can stay for 2 days with 2 massages for \$560. How much are they charging for each night stay and for each massage?

Use Desmos to graph the following and find the point or points of intersection. Draw a quick sketch to the right of the problem.

_____ 19.
$$\begin{cases} y = 3x - 1 \\ 2x - y = -1 \end{cases}$$

_____ 20.
$$\begin{cases} 4x - 9y = 2 \\ 2x - 3y = 4 \end{cases}$$

_____ 21.
$$\begin{cases} y = x^2 - 21x + 20 \\ y = \frac{1}{10}x \end{cases}$$

_____ 22.
$$\begin{cases} x^2 + y^2 = 9 \\ y = x^2 - 9 \end{cases}$$

_____ 23.
$$\begin{cases} y = x^2 - 9 \\ y = -x^2 + 9 \end{cases}$$