This is your review guide for the Chapter 7 Test. These problems are from your notes, so look up the answers in my notes at mrsspisak.weebly.com to make sure you did the review problems correctly. Keep practicing until you can get all the answer correct in less than an hour ©

Solve the system of equations by graphing. State your solution as an ordered pair.

$\begin{cases} y = -\frac{1}{4}x + 3\\ y = x - 2 \end{cases}$	$\begin{cases} y = -x + 1\\ y = -\frac{1}{2}x + 2 \end{cases}$
$\begin{cases} y = -2x + 1\\ y = -2x - 1 \end{cases}$	$\begin{cases} 2x + 4y = 8\\ y = -\frac{1}{2}x + 2 \end{cases}$

Solve the system of equations by elimination. State your solution as an ordered pair.

$\begin{cases} 3x + 5y = 6\\ -3x + 1y = 6 \end{cases}$	$\begin{cases} 2x + 4y = -4\\ 2x + 1y = 8 \end{cases}$	$\begin{cases} y = x + 2\\ y = -x \end{cases}$
$\begin{cases} 8x - 9y = 19\\ 4x + 1y = -7 \end{cases}$	$\begin{cases} 4x - y = 6\\ 3x + 2y = 21 \end{cases}$	$\begin{cases} 7x + 3y = 25 \\ -2x - y = -8 \end{cases}$
$\begin{cases} 5x + 7y = -1 \\ 4x - 2y = 22 \end{cases}$		$\begin{cases} 2x - 3y = -6\\ 3x + 2y = 30 \end{cases}$

Solve the system of equations by substitution. State your solution as an ordered pair.

$$\begin{cases} y = 2x + 2 \\ y = -3x - 8 \end{cases} \begin{cases} y = x + 1 \\ y = 2x - 1 \end{cases} \begin{cases} -3x + y = -2 \\ y = x + 6 \end{cases}$$
$$\begin{cases} 6x - 3y = 6 \\ y = 2x + 5 \end{cases} \begin{cases} y = 3x - 6 \\ -3x + y = -6 \end{cases}$$

## Write and solve a system of equations.

Suppose an antique car club publishes a newsletter. Expenses are \$0.35 for printing and mailing each copy, plus \$770 total for research and writing. The price of the newsletter is \$0.55 per copy. How many copies of the newsletter must the club sell to break even?

A plane takes about 6 hours to fly 2400 miles from NYC to Seattle. At the same time, your friend flies from Seattle to NYC. His plane travels with the same average flight speed, but his flight takes 5 hours. Find the average flight speed of the planes. Find the average wind speed.

Suppose you combine ingots of 25% copper alloy and 50% copper allow to create a 40 kg ingot of 45% copper alloy. How many kilograms of each do you need?

	← · · · · · · · · · · · · · · · · · · ·	+ + + + + + + + + + + + + + + + + + +
····••····••··························		
····•\$····b····d····b····d····b···d····b···d····b···d····b···d····b···d····b	····•ø····p····a····ø····a····ø····a····ø····a····ø····a····ø····a····ø····a····ø	
<b>A</b>	<b>A</b>	
·····Q····D····Q····Q····Q····Q····Q··		
<b>V</b>	▼	▼