

### **Solving Systems of Equations by Graphing Using Linear Regression Practice II**

For each set of data, use the linear regression function on a graphing calculator to write a system of equations. Solve the system of equations by graphing. Explain what the x- and y- values of the solution represent for that situation.

#### Example 1 - School Enrollment

<b>Year</b>	<b>School A</b>	<b>School B</b>
2011	628	432
2012	632	436
2013	627	461
2014	621	477
2015	615	488
2016	612	498

Equation 1 (School A): \_\_\_\_\_

Equation 2 (School B): \_\_\_\_\_

Solution: \_\_\_\_\_

Explanation:

When can the schools expect to have the same enrollment? \_\_\_\_\_

What will the enrollment be? \_\_\_\_\_

#### Example 2:

You and a friend start a typing class at the same time. You measure your speed weekly in words per minute (WPM). The data is recorded in the table below.

<b># of Weeks</b>	0	1	2	3
<b>Your WPM</b>	13	16	19	22
<b>Your Friend's WPM</b>	20	22	24	26

Equation 1 (Your WPM): \_\_\_\_\_

Equation 2 (Your Friend's WPM): \_\_\_\_\_

Solution: \_\_\_\_\_

Explanation:

After how many weeks can you expect to type as quickly as your friend? \_\_\_\_\_

What will the WPM be at that time? \_\_\_\_\_