

TRS 92: Solving Linear Systems

First, complete **MML: Solving Systems**.

1. Two electricians make house calls. Electrician A charges \$75 for a visit plus \$50 per hour of work. Electrician B charges \$95 for a visit plus \$40 per hour of work.
 - a. Let C be the cost of the visit in dollars and h represent the number of hours of work. Write a linear equation for each electrician.

 - b. For how many hours of work do the two electricians cost the same? What is that cost? Show your work.

2. The Wellborn Corporation offers two different stocks options for investors. One share of Premium stock is valued at \$10.55 and has a history of increasing \$0.25 per week. The corporation also offers shares of Gold stock for \$18.05 per share and has a history of increasing by \$0.15 per week. You plan to purchase one of each stock.
 - a. Assuming each stock continues to perform as it has historically, find the equation for the price of each stock, using t to represent the number of weeks you own the stock. Let $P(t)$ represent the value (in dollars) of your Premium stock and let $G(t)$ represent the value (in dollars) of your Gold stock.

 - b. Algebraically solve the system you wrote in **part a**. Show your work.

 - c. Clearly interpret the meaning of the solution to **part b** in the context of the problem.

Thinking Back about equations and solutions

Solve the following equations. Show your work.

1. $-2x - 13 = -7$

2. $5y + 7 = 2y + 1$

3. $-\frac{3n}{4} = 1$

4. Are the following coordinates a solution to the inequality: $2x + y \geq 7$?

Coordinate	Show your work	Yes or No
(0, 7)		
(-2, 4)		
(-1, 15)		
(1, 1)		