

Unit 5 - Day 20 Homework

Name:

Solving Systems using a Calculator

#1-4) Solve the system using a calculator.

$$1. \begin{aligned} y &= 3.6x - 5 \\ y &= 3.6x + 2 \end{aligned}$$

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$$3. \begin{aligned} y &= 4.7x - 9 \\ -x &= y + 1 \Rightarrow y = -1 - x \end{aligned}$$

 $(1.40, -2.40)$

$$2. \begin{aligned} -4x + 5y &= 10 \Rightarrow y = \frac{4}{5}x + 2 \\ 3x - 6y &= 11 \Rightarrow y = \frac{1}{2}x - \frac{11}{6} \end{aligned}$$

 $(-12.78, -8.22)$

$$4. \begin{aligned} y - 10 &= 3x \Rightarrow y = 10 + 3x \\ y &= \frac{1}{3}x - 8 \end{aligned}$$

 $(-0.68, -8.23)$ **Solve the application problem using your calculator:**

A small bag of trail mix contains 3 cups of dried fruit and 4 cups of almonds costing \$6.00. A large bag of contains $4\frac{1}{2}$ cups of dried fruit and 6 cups of almonds costing \$9.00. Write and solve a system of linear equations to find the cost of 1 cup of dried fruit and 1 cup of almonds.

Define the Variables:

$$\begin{aligned} x &= \text{cost 1 C of dried fruit} \\ y &= \text{cost 1 C of almonds} \end{aligned}$$

System of Equations:

$$\begin{aligned} 3x + 4y &= 6 \\ 4.5x + 6y &= 9 \end{aligned}$$

Solution:

Inf. many solutions...
what does this mean?!

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Define the Variables:System of Equations:Solution: