Solving Systems of Linear Equations Word Problems

Rhianna works at Staples. Mechanical pencils cost$1.10 each and pens cost $2.35 each. One day Rhianna sold a total of 172 pens and pencils for $294.20. How many pencils did Rhianna sell? How many pencils did she sell?

1. Define your variables: 2. Write two equations:

Let \_\_\_ =\_\_\_\_\_\_\_\_\_ Total number of pens and pencils\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Let\_\_\_ = \_\_\_\_\_\_\_\_\_ Total Cost of pens and pencils\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Choose your method to solve the system (graphing, substitution or elimination).

4. Make sure you solve for both variables.

5. Solution: How many mechanical pencils Rhianna sell? How many pens did Rhianna sell?

The length of a rectangle is 4 times its width. The perimeter of the rectangle is 30 cm. Find the dimensions of the rectangle.

1. Define your variables: 2. Write two equations:

Let \_\_\_ =\_\_\_\_\_\_\_\_\_ Equation for the length\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Let\_\_\_ = \_\_\_\_\_\_\_\_\_ Perimeter Equation\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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4. Make sure you solve for both variables.

5. Solution: What is the length and width of the rectangle?

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Total Cost of pens and pencils\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Perimeter Equation\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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