

Name _____

Mrs. Roubos

Date _____

8R Period _____

Systems Word Problems
Homework

1) A potter sells each vase for the same amount and each mug for the same amount. One day she sells 4 vases and 3 mugs for \$80. Another day she sells 3 vases and 6 mugs for \$90. How much does she charge for each vase x ? How much does she charge for each mug, y ?

a)

A) It costs \$26 for 3 bags of small beads and 4 bags of large beads. It costs \$20 for 5 bags of small beads and 2 bags of large beads. Which system of equations can be used to find the cost of each size bag?

A $\begin{cases} 3x + 5y = 20 \\ 4x + 2y = 26 \end{cases}$ C $\begin{cases} 3x + 4y = 20 \\ 5x + 2y = 26 \end{cases}$

B $\begin{cases} 3x + 5y = 26 \\ 4x + 2y = 20 \end{cases}$ D $\begin{cases} 3x + 4y = 26 \\ 5x + 2y = 20 \end{cases}$

B) A quiz has 26 questions and is worth 100 points. Some questions are worth 2 points. The rest are worth 5 points. Which system of equations can be used to find the number of each type of question?

A $\begin{cases} x + y = 26 \\ 2x + 5y = 100 \end{cases}$ C $\begin{cases} x + 2y = 26 \\ x + 5y = 100 \end{cases}$

B $\begin{cases} x + y = 100 \\ 2x + 5y = 26 \end{cases}$ D $\begin{cases} 2x + 2y = 26 \\ 5x + 5y = 100 \end{cases}$