

YOUR NAME: _____

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Read each problem **very carefully** before starting to solve it. Each problem is worth 5 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points. GOOD LUCK!!

1. Solve the following system using elimination:

$$\left\{ \begin{array}{rcl} 2x_1 + x_2 - x_3 & = & -1 \\ 5x_1 + 3x_2 + 2x_3 & = & 10 \\ 3x_1 - 2x_2 + 15x_3 & = & 7 \end{array} \right\}.$$

2. A company of sorority sisters visited a neighborhood restaurant and ordered 5 sandwiches, 7 orders of fries and 5 soft drinks and their total bill was \$56. A company of fraternity brothers went to the same restaurant and ordered 3 sandwiches, 6 orders of fries and 4 soft drinks and their bill was \$40. If each sandwich costs twice as much as each order of fries, how much does each sandwich and each soft drink cost at the restaurant?