

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. Use the **matrix method** to solve the 2×2 system $\begin{cases} 2x + 3y = 4 \\ x - 7y = 19 \end{cases}$.

2. Use the **elimination method** to solve the 3×3 system $\left\{ \begin{array}{l} 2x - y - z = 3 \\ 3x + y + 2z = 4 \\ 4x + 2y - z = -4 \end{array} \right\}$.

3. Use the product and quotient rules to simplify the following expressions and leave your answers **without negative exponents**:

$$\frac{21x^4y^{-7}x^{-12}}{3x^{-30}y^5} =$$

$$\frac{18x^3y^5x^{-3}}{4y^7} =$$