

YOUR NAME: _____

George Voutsadakis

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. Find an equation for the line ℓ passing through the point $(2, 7)$ and perpendicular to the line with equation $2x - 10y = 1$.

2. Simplify leaving your answers without negative exponents:

$$\left(\frac{x^{-3}y^5}{x^{-7}y^3} \right)^{-1} =$$

$$\left(\frac{(\sqrt[3]{x})^9}{x} \right)^{1/2} =$$