

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. Find an equation for the line ℓ passing through the point $(7, 38)$, that is perpendicular to the line ℓ' passing through the two points $(-45, 5)$ and $(15, -5)$.

2. Graph the solution set of the **compound** inequality in **two** variables:

$$3x + 2y \leq 6 \quad \text{and} \quad x - 5y \geq 5.$$

(Please show all work.)