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 that is perpendicular to the line with equation $5 x+3 y=-1$ and passes through the point $(2,-5)$. Then write the equation that you found in the slopeintercept form.
2. Simplify and/or evaluate the following exponential expressions:

$$
\left(\frac{25}{4}\right)^{-3 / 2}=
$$

$$
\frac{x^{7} y^{3}}{x^{5} y^{-2}}=
$$

$$
\left(\frac{x^{-3}}{y^{2}}\right)^{-5}=
$$

