Find $\frac{d^{2} y}{d x^{2}}$ for each of the following. Simplify your answer as much as possible. Show your work neatly organized.

1. $\mathrm{x}^{2}+\mathrm{y}^{2}=\mathbf{2 5}$
2. $x^{2}-2 y^{2}=7$
3. $9 x^{2}+4 y^{2}=36$
4. $y^{2}-2 x-2 y=1$

## Calculus Worksheet \#5 Unit 5 page 2

Find $\frac{d^{2} y}{d x^{2}}$ for each of the following. Simplify your answer as much as possible. Show your work neatly organized.
5. $x^{3} y^{2}=2$
6. $x^{2}+x y+y^{2}=10$

