Math 101 (03): Homework #7

due Thursday, Oct.14

Find the derivatives dy/dz of the following functions

1. $\sqrt{1-x^2}$

2. $x^2+y^2=\sqrt{7}$

3. $xy-x-y^3=xy^2$

4. $x^2y-2y+5=0$

5. $\sqrt{x}\sqrt{y}=25$

6. Find the equation of the tangent line to the curve $6x^2+4y^2=36$ at the point $(\sqrt{6},0)$.

7. Find the equation of the tangent line to the curve $xy^2=1$ at the point $(1,-1)$.