Keeper 4.7 Virtual Problems

Find the derivative

1. $(3x + 7)^2 = 2y^3$

2. $y^2 = \dfrac{x-1}{x+1}$

3. $x^3 - xy + y^3 = 1$

4. $x = \tan y$

5. $x + \sin y = xy$

6. $y^2 \cos\left(\dfrac{1}{y}\right) = 2x + 2y$

Find the first and second derivative

7. $x^2 + y^2 = 1$

8. $x + \sin y = xy$

Find the equation of the tangent line

9. $x^2 y^2 = 9$ at $(-1,3)$

Keeper 4.8 Virtual Problems

Find the derivative

1. $= x^x$

2. $y = x^{\cos x}$

3. $y = x^{\ln x}$

4. $y = (2x - 1)^{x-3}$

5. $y = (\ln x)^x$

6. $y = (x - 5)^4(3x^3 - 1)^3$