A. $y = \sin x + \cos(2x)$	E. $y = e^{x^2} + 4x - \frac{1}{\sqrt[3]{x}}$
B. $y = \frac{4^x}{4x-1}$	F. $g(x) = \frac{3}{\sec(2x)}$
C. $x - y^2 = 4x^3 - 1$	G. $h(x) = x^2 \sec(x)$
D. $f(x) = 3\ln(x^2+2)$	H. $y = 4\sqrt{\cot(\sin 3x)}$

1. Find the slope of H in terms of x

2. Find the instantaneous slope of B at $x = 0$

3. Find $\frac{d^2x}{dy^2}$ of A

4. Find the equation of the tangent line of D at $x = 1$

5. Find the equation of the normal line of D at $x = 1$

6. Find $\left.\frac{dy}{dx}\right|_{(0,1)}$ for C.

7. Find equation of the normal line for C at $(0,1)$

8. Find $F'(x)$

9. Find equation of normal line for G at (π, π^2)

10. Find equation of tangent line for E at $x = 1$