Quiz 3.2

Name

1. If $3x^2 + 5x^2y^2 = 2y$, then $\frac{dy}{dx} =$

(A) $\frac{-6x}{20xy-2}$

(B) $\frac{-10xy^2-6x}{10x^2y-2}$

(C) $\frac{2-6x-10xy^2}{10x^2y}$

(D) $\frac{6x+10xy^2+10x^2y}{2}$

2. If $y = \ln(2x^2 - 3y^2)$, then $\frac{dy}{dx} =$

(A) $\frac{1}{2x^2-3y^2}$

(B) $\frac{4x}{2x^2-3y^2}$

(C) $\frac{4x-6y}{2x^2-3y^2}$

(D) $\frac{4x}{2x^2-3y^2+6y}$

3. If $e^{2y} - e^{(y^2-y)} = x^4 - x^2$, then the value of $\frac{dy}{dx}$ at the point $(1, 0)$ is

(A) 0

(B) $\frac{1}{2}$

(C) $\frac{2}{3}$

(D) 2