

1. If $\sin(xy) = x^2$, then $\frac{dy}{dx} =$

A) $2x \sec(xy)$

B) $\frac{\sec(xy)}{x^2}$

C) $2x \sec(xy) - y$

D) $\frac{2x \sec(xy)}{y}$

E) $\frac{2x \sec(xy) - y}{x}$

2. If $x + y = xy$, then $\frac{dy}{dx} =$

A) $\frac{1}{x-1}$

B) $\frac{y-1}{x-1}$

C) $\frac{1-y}{x-1}$

D) $x + y - 1$

E) $\frac{2-xy}{y}$

3. If $y^2 - 2xy = 21$, then $\frac{dy}{dx}$ at the point $(2, -3)$ is

A) $-\frac{6}{5}$

B) $-\frac{3}{5}$

C) $-\frac{2}{5}$

D) $\frac{3}{8}$

E) $\frac{3}{5}$