

XVI Find $\frac{dy}{dx} = ?$

a) $\frac{1}{2}x^2 - y = 6x$

b) $4x^2y - \frac{3}{y} = 0$

c) $xy^2 + 4xy = 10$

d) $\frac{xy - y^2}{y - x} = 1$

e) $\frac{2x + y}{x - 5y} = 1$

f) $x^2y = e^{x+y}$

g) $x - xe^y = 3$

h) $\ln(xy) = 2$

i) $\ln(2x + 3y) = 7$

XVII Find the equation of the tangent line to the graph of the given function at the given point

a) $x^2 + y^2 = 9$ point: $(0, 3)$

b) $4xy + x^2 = 5$ point $(1, 1)$