

Quiz

Name: _____

1. Find the partial derivatives of:

(a) $z = \sqrt{x + 2y}$

(b) $f(u, v) = u \sin(uv)$

2. Let $A(x, y) = x^3y + 2xy$.

(a) Write the full microscope equation for A at the point where $x = 1$ and $y = 2$.

(b) Note that when $x = 1$ and $y = 2$ that $A(1, 2) = (1)^3(2) + 2(1)(2) = 6$. If A is increased to 6.1 and y is decreased to 1.8, then approximate the change in x .