

Quiz 13 — MA16020 — March 2, 2018

Alden Bradford

1. (4 points) The contour lines for $z = \frac{1}{2} \ln(5(x+2)^2 + 5(y-4)^2)$ are circles. Find the center of these circles, and express their radius in terms of z .

2. Let $f(x, y) = 6x^2 + 8xy^2 - y^3$.
 - (a) (3 points) Find the full derivative, $\frac{d}{dx}f(x, y)$.
 - (b) (3 points) Find the partial derivative, $\frac{\partial}{\partial x}f(x, y)$.