

(C1-7.1a) Name:

Homework Questions 1 – Calculating an Estimate of a Gradient

1. A is the point with coordinates (3,1) on the curve $Y = (X - 2)^2$

Find the gradients of the chords joining A to:

a) Point B (4,4)

b) Point C (3.5, 2.25)

c) Point D (3.3, 1.69)

d) Point E (3.1, 1.21)

e) Point F (3.01, 1.0201)

f) Point G (3.001, 1.002001)

2. What do you deduce about the gradient of the tangent at the point (3,1) and explain why?

Gradient = 2 as the values get closer to A the gradient gets closer to 2