

2020W A33 Quiz 4 T10/11/22 Rubric

[Q1]

(-0.5 marks) - missing axis, or points labelling

(-1 marks) - for each incorrect axis in 3D

\*Note: to get perfect on the final, you will need to give the graph a 3D “feel”, ie. drawing a circle for 1b) will not be sufficient

[Q2]

3 marks - calculating the 3 level curves

2 marks - diagram of the level curves on the xy plane

(-0.5 marks) - missing axis, or points labelling

(-0.5 marks) - arithmetic error

[Q3]

(-0.5 marks) - each incorrect part, includes negative signs, wrong variable... everything

[Q4]

2 marks \* 2 - calculating partial derivative with respect to x, y

1 marks \* 2 - setting  $G_x, G_y = 0$  such that it becomes a horizontal plane

1 mark -  $G(-4,1) = \dots$

(-0.5 marks) - arithmetic error

[Q5a]

2 marks \* 2 - partial derivative of  $q_a/P_b, q_b/P_a$

2 marks - why A, B are complementary, must write they are both negative

[Q5b]

2 marks - decreasing

Note: on final exam, pls give a very brief explanation