

ECONOMICS 1A: PROBLEM SET 1**Review of Graphs and Formulas**

1. For each of the following equations, graph the line and calculate its slope.
 - a. $P = 10 - 2Q$ (put Q on the X axis)
 - b. $P = 100 - 4Q$ (put Q on the X axis)
 - c. $P = 50 + 6Q$ (put Q on the X axis)
 - d. $I = 10,000 - 500r$ (put I on the X axis)

2. Calculate the area under the lines in 1a and 1b from $Q = 0$ to $Q = 5$.

3. Graph the following equations (with Q on the X axis) and calculate where the lines intersect.
 - a. $P = 10 - 2Q, P = 4 + Q$
 - b. $P = 100 - 4Q, P = 50 + 6Q$

4. Calculate the area between the two curves and the vertical axis in 3a and 3b