

HOMEWORK FOUR – due Thursday October 21st

Name: _____

If you work with others please hand in your assignment in your own words and identify those you worked with. Make sure this assignment is handed in at the beginning of class.

1. The following table shows the total cost for a product that sells for \$20 a unit.

Quantity	TC
0	30
1	55
2	75
3	85
4	100
5	120
6	145
7	185
8	240
9	310
10	395

- a. Draw the perfectly competitive firm (include MC, MR, D, ATC and AVC) and the industry on side-by-side graphs. Also be sure to indicate the firm's short-run supply curve.

- b. What is the output level for a profit maximizing firm? (Place your answers in the table).

- c. How does your answer change if price rises to \$25?

- d. Calculate profit in b and in c above.

- d. Should the firm stay in business at $P = \$20$?

At \$25?

- e. Suppose $P = \$15$, what output level maximizes profits? What is the profit? Should the firm stay in business?

