

Economics Workshop

Topic 6: Revenue and Profit

- Complete the following table for profit-maximising firm producing Good X in the short run, and determine the profit maximising price and output for the firm.

Q	TC	TR	TFC	TVC	MR	T π
0	30	0	30	0		-30
1	40	50	30	10	50	10
2	46	70	30	16	20	24
3	48	84	30	18	14	36
4	50	94	30	20	10	44
5	60	100	30	30	6	40
6	72	102	30	42	2	30

Profit maximizing output (Q) is 4 units.

Profit maximizing price is equal to the average revenue (AR) = $TR / Q = 94/4 = \$23.5$

- Complete the following table:

Marginal condition	Decision (increase or reduce output)
MR > MC	Increase
MR < MC	Decrease
MR = MC	Keep for maximum profit

- A firm will maximise its profits if it produces and sells the level of output where:
 - marginal revenue equals average cost.
 - average revenue equals average cost.
 - average revenue equals total cost.
 - marginal revenue equals marginal cost.
 - average revenue equals marginal cost.
- A store will supply T-shirts to a student society at \$12 a T-shirt, but will offer a 30% discount on the total bill of 100 T-shirts or more are purchased. What would be the firm's marginal revenue for the 100th T-shirt?

- a. -\$348
 - b. \$84
 - c. \$840
 - d. -\$353
 - e. \$12
5. Consider a firm operating in a market in which it is a price taker. In other words, it faces a horizontal demand curve. What shape is its total revenue curve?
- a. Rectangular hyperbola
 - b. Ellipse
 - c. \$840
 - d. Parabola
 - e. A straight line out from the origin