

- c. If total fixed cost in this industry is \$16 and the marginal cost is given above, calculate average total cost and profit when the firm produces the profit maximizing level of output. Illustrate the firms profit on the graph. **[3 MARKS]**

$$ATC = AFC + AVC = FC / Q + MC = 16/4 + 6 = \$10$$

$$\text{Profit} = TR - TC = (P \times Q) - ATC \times Q = 18 \times 4 - 10 \times 4 = 8 \times 4 = \$32$$

- d. Suppose now that instead of one monopolist, this industry has 10 firms in a