

# Practice Questions - Optimum selling Price/Quantity

(A)

Selling Price £150  
 Currently sell 400 units  
 Change in price of £20  
 Change in quantity 50 units  
 Variable costs £100  
 Fixed costs £1,500

(B)

£200  
 800 units  
 £15  
 100 units  
 £50  
 £2,000

Do these questions and then look at my workings

$$262.50 \times 205 = 27 \pm 562.50 \text{ Total Profit}$$

$$+ 20 \times 205 = 4100$$

$$\text{Profit } = 262.50 \times 205 + 4100$$

$$310 - 108 = 202$$

$$262.50 \times 205 = 53812.50$$

assume you can sell half a unit

$$x = \frac{310 - 108}{0.8}$$

$$= 252.50$$

$$310 > 252.50 = \text{MR}$$

$$310x = 0.4x^2 = \text{MR}$$

$$310 - 0.4x = \text{TR}$$

$$\text{sell one } \frac{20}{50} = 0.40$$

$$\frac{400}{50} = 8 \times 20 = 160$$

$$\frac{150}{50} = 3$$

A.

$$900 \times (320 - 50) = 270000$$

$$- 2000 \times 900 = 180000$$

$$= 90000$$

$$320 - 0.15(900) = 185$$

$$900$$

$$320 = 0.15x = \text{MR}$$

$$320x = 0.15x^2 = \text{MR}$$

$$320 - 0.15x = \text{TR}$$

$$\text{sell one at } \frac{100}{150} = 0.15$$

$$\frac{800}{100} = 8 \times 15 = 120$$

$$\frac{200}{100} = 2$$

B.