

# Paul Robbins training and consultancy

## Management Accounting – Costing

### Cost Classification and Ordering & Issuing Inventory

#### High / Low Technique – Exercise

#### Model Answers

##### Task 1

You have been provided with the following information:

Production Output (Units)	Total Cost (£)
750	22,600
900	25,900
150	3,300

1. Calculate the variable cost per unit

$$VC \text{ per unit} = £3,300 / 150 \text{ units} = £22 \text{ per unit}$$

2. Calculate the fixed cost element

$$\text{For 750 units: } FC = TC - VC$$

$$FC = £22,600 - (£22 \times 750), FC = £22,600 - £16,500, FC = £6,100$$

3. Calculate the total cost for a production output of 1,300 units

$$TC = FC + VC$$

$$TC = £6,100 + (£22 \times 1,300), TC = £6,100 + £28,600, TC = £34,700$$

## **Task 2**

**You have been provided with the following information:**

<b>Production Output (Units)</b>	<b>Total Cost (£)</b>
5,650	49,400
6,100	53,000
450	3,600

**1. Calculate the variable cost per unit**

$$\text{VC per unit} = £3,600 / 450 \text{ units} = £8 \text{ per unit}$$

**2. Calculate the fixed cost element**

$$\text{For 5,650 units: } FC = TC - VC$$

$$FC = £49,400 - (£8 \times 5,650), FC = £49,400 - £45,200, FC = £4,200$$

**3. Calculate the total cost for a production output of 6,850 units**

$$TC = FC + VC$$

$$TC = £4,200 + (£8 \times 6,850), TC = £4,200 + £54,800, TC = £59,000$$

### **Task 3**

**You have been provided with the following information:**

<b>Production Output (Units)</b>	<b>Total Cost (£)</b>
12,500	236,475
14,880	275,745
2,380	39,270

**1. Calculate the variable cost per unit**

$$VC \text{ per unit} = £39,270 / 2,380 \text{ units} = £16.50 \text{ per unit}$$

**2. Calculate the fixed cost element**

$$\text{For 12,500 units: } FC = TC - VC$$

$$FC = £236,475 - (£16.50 \times 12,500), FC = £236,475 - £206,250, FC = £30,225$$

**3. Calculate the total cost for a production output of 16,000 units**

$$TC = FC + VC$$

$$TC = £30,225 + (£16.50 \times 16,000), TC = £30,225 + £264,000, TC = £294,225$$

#### **Task 4**

**You have been provided with the following information:**

<b>Production Output (Units)</b>	<b>Total Cost (£)</b>
<b>3,150</b>	<b>21,430</b>
<b>4,040</b>	<b>25,435</b>
<b>890</b>	<b>4,005</b>

**1. Calculate the variable cost per unit**

$$\text{VC per unit} = £4,005 / 890 \text{ units} = £4.50 \text{ per unit}$$

**2. Calculate the fixed cost element**

$$\text{For 3,150 units: } FC = TC - VC$$

$$FC = £21,430 - (£4.50 \times 3,150), FC = £21,430 - £14,175, FC = £7,255$$

**3. Calculate the total cost for a production output of 4,350 units**

$$TC = FC + VC$$

$$TC = £7,255 + (£4.50 \times 4,350), TC = £7,255 + £19,575, TC = £26,830$$