## A1. Sparkle

Sparkle Ltd makes jewellery products using silver and gemstones. You have been given the following information for its three products, necklaces, bracelets, and earrings:

|  | Necklace | Bracelet | Earrings |
| :--- | ---: | :--- | :--- |
| Sales volume | 1,000 | 750 | 250 |
| Raw materials |  |  |  |
| Silver - grams | 60 | 20 | 10 |
| Gemstones - <br> number | 12 | 5 | 2 |


| Raw material Inventory | Silver (grams) | Gemstones (number) |
| :--- | ---: | ---: |
| Opening inventory | 8,000 | 3000 |
| Closing inventory | 12,000 | 2000 |
| Cost | $£ 400$ per kg | $£ 60$ per stone |

1. How much silver is needed to meet the production forecast?

| A | 120 kg |
| ---: | ---: |
| B | 7.75 kg |
| C | 77.5 kg |
| D | 40 kg |

2. How many gemstones are needed to meet the production forecast?

A 16,250
B $\quad 24,000$
C $\quad 10,000$
D $\quad 4,000$
3. How much silver needs to be purchased?

| A | 73.5 g |
| :--- | ---: |
| B | 77.5 kg |
| C | $77,504 \mathrm{~g}$ |
| D | 81.5 kg |

4. How many gemstones need to be purchased?

| A | 23,000 |
| :--- | ---: |
| B | 17,250 |
| C | 15,250 |
| D | 3,000 |

5. What is the total purchase budget?

| A | $£ 32,600$ |
| :--- | ---: |
| B | $£ 915,000$ |
| C | $£ 1,006,000$ |
| D | $£ 947,600$ |

## A2. ViewCo

ViewCo sells televisions and the management accountant has been given the following estimates for the coming year:

|  | Smart TV | High definition TV |
| :--- | ---: | ---: |
| Selling price £ | 600 | 900 |
| Cost price £ | 400 | 650 |
| Estimated sales volume | 12,000 | 15,000 |
| Opening inventory | 1,300 | 1,400 |
| Closing inventory | 1,500 | 1,200 |

1. What is the total budgeted revenue?

A $£ 7,200,000$
B £20,700,000
C £13,500,000
D £27,000
2. How many Smart TVs needed to be purchased?

A $\quad 12,200$
B 7,200,200
C 11,800
D 7,200,000
3. What should the budget labour be?

A $\$ 206,000$
B $\quad \$ 233,333$
C $\quad \$ 240,333$
D \$200,000
4. What should the revised fixed cost be?

A $\$ 120,000$
B $\$ 123,600$
C $\$ 122,400$
D $\$ 140,000$
5. What should the revised profit be?

A $\$ 241,567$
B $\$ 130,000$
C $\$ 151,667$
D $\$ 171,667$

## A3. Reflection

A company, Reflection Ltd, makes mirrors and its managing directors have asked the management accountant to produce a budget for the following year. He has given the following assumptions from which the management accountant can calculate the budget for 2019, using actual information for 2018.

|  | 2018 Actuals | 2019 assumptions |
| :--- | ---: | ---: |
| Volume: <br> mirrors | 15,000 | 17,500 |
| Selling price per <br> mirror | $\$ 50$ | Increase selling <br> price by $10 \%$ |
| Materials | $\$ 300,000$ | $2 \%$ inflation |
| Labour | $\$ 200,000$ | $3 \%$ inflation |
| Fixed costs | $\$ 120,000$ | $3 \%$ inflation |
| Profit | $\$ 130,000$ |  |

1. What should the sales budget be?

A $\$ 875,000$
B $\quad \$ 825,000$
C $\$ 750,000$
D \$962,500
2. What should the budget material cost be?

A $\$ 350,000$
B $\quad \$ 357,000$
C $\$ 300,000$
D $\$ 300,600$
3. What should the budget labour be?

A $\$ 206,000$
B $\$ 233,333$
C $\$ 240,333$
D $\$ 200,000$

## 4. What should the revised

 fixed cost be?A $\$ 120,000$
B $\$ 123,600$
C $\$ 122,400$
D $\$ 140,000$
5. What should the revised profit be?

A $\$ 241,567$
B $\$ 130,000$
C $\$ 151,667$
D $\$ 171,667$

## A4. WrapUp Ltd

A company, WrapUp Ltd manufactures jumpers, cardigans and hats from wool and buttons. The management accountant of WrapUp needs to calculate the amount of raw material to be purchased for the coming year.

|  | Jumpers | Cardigans | Hats |
| :--- | :--- | :--- | :--- |
| Volume of <br> estimated sales | 200 |  | 400 |


| Raw materials | Wool | Buttons |
| :--- | ---: | :--- |
| Opening inventory | 260 | 80 |
| Closing inventory | 240 | 100 |
| Cost per item | $£ 8$ | $£ 0.10$ |

## Required:

1. Using the information above, calculate the number of balls of wool and the number of buttons that are required to make the jumpers, cardigans, and hats for the coming year.
2. Calculate a purchase budget for each raw material, wool and buttons, in both quantity and costs.
3. Calculate the total purchase budget for WrapUp Ltd.

## A5 Tablet Ltd

A hi-tech company manufactures laptops and tablets. The following estimates have been given by the Sales director for the following year:

|  | Laptop | Tablet |
| :--- | ---: | ---: |
| Selling price per <br> item £ | 500 |  |
| Estimated sales <br> volume | 2,000 | 300 |
| Opening inventory | 200 | 4,000 |
| Closing inventory | 240 | 50 |
| Purchase cost per <br> item | 300 | 40 |

## Required:

1 Using the information above, calculate the estimated sale revenue for the following year for each product and for the company in total.
3. Calculate how many items need to be purchased, taking into account the levels of inventory at the start and end of the year.
4. Calculate the value of the purchase budget for each product and the total purchase budget for the company.
5. Calculate the sales margin for each of the products and the company.

## A6. Cushion Co

A company makes luxury cushions to each customer's specific requirements. The interior design market, in which the business operates, has been growing fast. However, there is a shortage of high-skilled labour to make the cushions by hand. The fabric (raw material) is easy to source.

| $£$ | Budget | Actual | Variance |
| :--- | :--- | :--- | :--- |
| Sales volume | 200 | 250 | 50 |
| Materials £ | 12,000 | 13,000 | $(1,000)$ |
| Direct labour £ | 5,600 | 7,000 | $(1,400)$ |


|  | Material <br> $£$ | Labour <br> $£$ |
| :--- | :--- | :--- |
| Price/rate variance | 1,200 | $(3,300)$ |
| Usage/efficiency <br> variance | $(4,200)$ | 2,800 |
| Total variance | $(3,000)$ | $(500)$ |

## Required:

Review the variance analysis and suggest reasons for the results.

## A7. Snap Ltd

The CEO of a camera manufacturer is reviewing the first draft of the budget for 2026, drawn up by the management accountant. The company operates in a very price competitive market with limited prospects for growth. General inflation is running at $2 \%$. Head office costs are charged at a rate of $5 \%$ of sales.

## Required:

Examine the budget below and consider what questions you would advise the board to ask the management accountant.

| Snap: a comparison of 2025 actuals to 2026 budget |  |  |
| :---: | :---: | :---: |
|  | 2025 actual | 2026 budget |
| Number of cameras | 120,345 | 132,380 |
|  | $£$ | £ |
| Average price per | 350 | 360.5 |
| Sales revenue | 42,120,750 | 47,722,810 |
| Material cost | 12,636,225 | 12,888,950 |
| Direct labour cost | 683,200 | 751,520 |
| Factory utilities | 32,505 | 33,155 |
| Factory depreciation | 2,300,126 | 2,300,126 |
| Factory administration costs | 59,365 | 59,365 |
| Marketing and sales costs | 60,285 | 55,000 |
| Head office charge | 6,017 | 6,017 |
| Profit | 26,343,027 | 33,498,803 |

A8. What type of budget best addresses the challenges of budgeting?

