

Variations – Solution

Total Cost Variance

Standard cost	$\pounds 186,000 \times 28,000 / 30,000$	173,600
Actual cost		174,540

Variance		$\pounds \quad 940 \text{ ADV}$

Total Materials Cost Variance

Standard material cost	$\pounds 60,000 \times 28,000 / 30,000$	56,000
Actual material cost		47,040

Variance		$\pounds \quad 8,960 \text{ FAV}$

Total Labour Cost Variance

Standard labour cost	$\pounds 54,000 \times 28,000 / 30,000$	50,400
Actual labour cost		59,500

Variance		$\pounds \quad 9,100 \text{ ADV}$

Total Fixed Overhead Cost Variance

Standard fixed ohd cost	$\pounds 72,000 \times 28,000 / 30,000$	67,200
Actual fixed ohd cost		68,000

Variance		$\pounds \quad 800 \text{ ADV}$

Check: $\pounds 8,960 - \pounds 9,100 - \pounds 800 = \pounds 940 \text{ ADV}$

Material Price Variance

Standard price	£60,000 / 15,000 kg	£4.00 per kg
Actual price	£47,040 / 11,200 kg	£4.20 per kg

Difference		£0.20 per kg
Actual usage	x	11,200 kg

Variance		£ 2,240 ADV

Material Usage Variance

Standard usage	15,000 kg x 28,000 / 30,000	14,000 kg
Actual usage		11,200 kg

Difference		2,800 kg
Standard price	x	£4.00 per kg

Variance		£11,200 FAV

Check: £2,240 - £11,200 = £8,960 FAV

Labour Rate Variance

Standard rate	£54,000 / 6,000 hrs	£9.00 per hr
Actual price	£59,500 / 7,000 hrs	£8.50 per hr

Difference		£0.50 per hr
Actual hours	x	7,000 hrs

Variance		£ 3,500 FAV

Labour Efficiency Variance

Standard hours	6,000 kg x 28,000 / 30,000	5,600 hrs
Actual hours		7,000 hrs

Difference		1,400 hrs
Standard rate	x	£9.00 per hr

Variance		£12,600 ADV

Check: £3,500 - £12,600 = £9,100 ADV

Fixed Overhead Expenditure Variance

Budgeted fixed overheads	72,000
Actual fixed overheads	68,000

Variance	£ 4,000 FAV

Fixed Overhead Volume Variance

Budgeted output	30,000 units		
Actual output	28,000 units		

Difference	2,000 units		
Standard expenditure	£72,000 / 30,000 units	x	£2.40 per unit

Variance			£ 4,800 ADV

Check: £4,000 - £4,800 = £800 ADV

Fixed Overhead Capacity Variance

Budgeted hours	6,000 hrs		
Actual hours	7,000 hrs		

Difference	1,000 hrs		
Standard absorption rate	£72,000 / 6,000 hrs	x	£12.00 per hr

Variance			£12,000 FAV

Fixed Overhead Efficiency Variance

Standard hours	6,000 x 28,000 / 30,000	5,600 hrs	
Actual hours		7,000 hrs	

Difference		1,400 hrs	
Standard absorption rate		x	£12.00 per hr

Variance			£16,800 ADV

Check: £12,000 - £16,800 = £4,800 ADV

Note: the volume variance can also be calculated as a comparison of budgeted hours to standard hours, 6,000 – 5,600 = 400 hrs, 400 hrs x £12 per hr = £4,800 ADV