22 Further variance analysis 53 mins

22.1 A company currently uses a standard absorption costing system. The fixed overhead variances extracted from the operating statement for November are:

	$
Fixed production overhead expenditure variance	5,800 adverse
Fixed production overhead capacity variance	4,200 favourable
Fixed production overhead efficiency variance	1,400 adverse

PQ Limited is considering using standard marginal costing as the basis for variance reporting in future. What variance for fixed production overhead would be shown in a marginal costing operating statement for November?

A No variance would be shown for fixed production overhead
B Expenditure variance: $5,800 adverse
C Volume variance: $2,800 favourable
D Total variance: $3,000 adverse **(2 marks)**

22.2 Which of the following situations is most likely to result in a favourable selling price variance?

A The sales director decided to change from the planned policy of market skimming pricing to one of market penetration pricing.

B Fewer customers than expected took advantage of the early payment discounts offered.

C Competitors charged lower prices than expected, therefore selling prices had to be reduced in order to compete effectively.

D Demand for the product was higher than expected and prices could be raised without adverse effects on sales volumes. **(2 marks)**

The following information relates to questions 22.3 to 22.6.

A company manufactures a single product. An extract from a variance control report together with relevant standard cost data is shown below.

Standard selling price per unit	$70
Standard direct material cost (5kg × $2 per kg)	$10 per unit
Budgeted total material cost of sales	$2,300 per month
Budgeted profit margin	$6,900 per month
Actual results for February	
Sales revenue	$15,200
Total direct material cost	$2,400
Direct material price variance	$800 adverse
Direct material usage variance	$400 favourable

There was no change in inventory levels during the month.

22.3 What was the actual production in February?

A 200 units C 240 units
B 217 units D 280 units **(2 marks)**

22.4 What was the actual usage of direct material during February?

A 800 kg C 1,200 kg
B 1,000 kg D None of these **(2 marks)**

22.5 What was the selling price variance for February?

A $120 (F) C $1,200 (A)
B $900 (A) D $1,200 (F) **(2 marks)**

22.6 What was the sales volume profit variance for February?

A $900 (F) C $900 (A)
B $1,200 (F) D $2,100 (A) **(2 marks)**

22.7 A company uses a standard absorption costing system. The following details have been extracted from its budget for April.

Fixed production overhead cost	$48,000
Production (units)	4,800

In April the fixed production overhead cost was under absorbed by $8,000 and the fixed production overhead expenditure variance was $2,000 adverse.

What was the actual number of units produced?

A 3,800 C 4,800
B 4,200 D 5,800 **(2 marks)**

22.8 A company purchased 6,850 kgs of material at a total cost of $21,920. The material price variance was $1,370 favourable. What was the standard price per kg?

A $0.20
B $3.00
C $3.20
D $3.40 **(2 marks)**

22.9 The following data relates to one of a company's products.

	$ per unit	*$ per unit*
Selling price		27.00
Variable costs	12.00	
Fixed costs	9.00	
		21.00
Profit		6.00

Budgeted sales for control period 7 were 2,400 units, but actual sales were 2,550 units. The revenue earned from these sales was $67,320.

Profit reconciliation statements are drawn up using marginal costing principles. What sales variances would be included in such a statement for period 7?

	Price	*Volume*
A	$1,530 (A)	$900 (F)
B	$1,530 (A)	$2,250 (F)
C	$1,530 (A)	$2,250 (A)
D	$1,530 (F)	$2,250 (F)

(2 marks)

22.10 A company uses variance analysis to control costs and revenues.

Information concerning sales is as follows:

Budgeted selling price	$15 per unit
Budgeted sales units	10,000 units
Budgeted profit per unit	$5 per unit
Actual sales revenue	$151,500
Actual units sold	9,800 units

What is the sales volume profit variance?

A $500 favourable

B $1,000 favourable

C $1,000 adverse

D $3,000 adverse

(2 marks)

The following information relates to questions 22.11 and 22.12.

The standard direct material cost per unit for a product is calculated as follows:

10.5 litres at $2.50 per litre

Last month the actual price paid for 12,000 litres of material used was 4% above standard and the direct material usage variance was $1,815 favourable. No stocks of material are held.

22.11 What was the adverse direct material price variance for last month?

A $1,000
B $1,200
C $1,212
D $1,260 **(2 marks)**

22.12 What was the actual production last month (in units)?

A 1,074
B 1,119
C 1,212
D 1,258 **(2 marks)**

22.13 Last month a company budgeted to sell 8,000 units at a price of $12.50 per unit. Actual sales last month were 9,000 units giving a total sales revenue of $117,000.

What was the sales price variance for last month?

A $4,000 favourable
B $4,000 adverse
C $4,500 favourable
D $4,500 adverse **(2 marks)**

22.14 A company uses a standard absorption costing system. Last month budgeted production was 8,000 units and the standard fixed production overhead cost was $15 per unit. Actual production last month was 8,500 units and the actual fixed production overhead cost was $17 per unit.

What was the total adverse fixed production overhead variance for last month?

A $7,500
B $16,000
C $17,000
D $24.500 **(2 marks)**

22.15 A cost centre had an overhead absorption rate of $4.25 per machine hour, based on a budgeted activity level of 12,400 machine hours.

In the period covered by the budget, actual machine hours worked were 2% more than the budgeted hours and the actual overhead expenditure incurred in the cost centre was $56,389.

What was the total over or under absorption of overheads in the cost centre for the period?

A $1,054 over absorbed
B $2,635 under absorbed
C $3,689 over absorbed
D $3,689 under absorbed **(2 marks)**

22.16 A company uses standard marginal costing. Last month the standard contribution on actual sales was $10,000 and the following variances arose:

	$
Total variable costs variance	2,000 Adverse
Sales price variance	500 Favourable
Sales volume contribution variance	1,000 Adverse

What was the actual contribution for last month?

A $7,000
B $7,500
C $8,000
D $8,500 **(2 marks)**

22.17 AD Ltd manufactures and sells a single product, E, and uses a standard absorption costing system. Standard cost and selling price details for product E are as follows.

	$ per unit
Variable cost	8
Fixed cost	2
	10
Standard profit	5
Standard selling price	15

The sales volume variance reported for last period was $9,000 adverse.

AD Ltd is considering using standard marginal costing as the basis for variance reporting in future. What would be the correct sales volume variance to be shown in a marginal costing operating statement for last period?

A $6,428 (A)
B $6,428 (F)
C $12,600 (F)
D $12,600 (A) **(2 marks)**

22.18 When comparing the profits reported under absorption costing and marginal costing during a period when the level of inventory increased, which of the following is true?

A Absorption costing profits will be higher and closing inventory valuations lower than those under marginal costing.

B Absorption costing profits will be higher and closing inventory valuations higher than those under marginal costing.

C Marginal costing profits will be higher and closing inventory valuations lower than those under absorption costing.

D Marginal costing profits will be higher and closing inventory valuations higher than those under absorption costing. **(2 marks)**

22.19 PH Ltd produces a single product and currently uses absorption costing for its internal management accounting reports. The fixed production overhead absorption rate is $34 per unit. Opening inventories for the year were 100 units and closing inventories were 180 units. The company's management accountant is considering a switch to marginal costing as the inventory valuation basis.

If marginal costing were used, the marginal costing profit for the year, compared with the profit calculated by absorption costing, would be which of the following?

A $2,720 lower
B $2,720 higher
C $3,400 lower
D $3,400 higher **(2 marks)**

22.20 The budgeted contribution for HMF Co for June was $290,000. The following variances occurred during the month.

	$	
Fixed overhead expenditure variance	6,475	Favourable
Total direct labour variance	11,323	Favourable
Total variable overhead variance	21,665	Adverse
Selling price variance	21,875	Favourable
Fixed overhead volume variance	12,500	Adverse
Sales volume variance	36,250	Adverse
Total direct materials variance	6,335	Adverse

What was the actual contribution for the month?

A $252,923
B $258,948
C $321,052
D $327,077 **(2 marks)**

22.21 **The following question is taken from the December 2011 exam paper.**

A company calculates the following under a standard absorption costing system.

(i) The sales volume margin variance
(ii) The total fixed overhead variance
(iii) The total variable overhead variance

If a company changed to a standard marginal costing system, which variances could change in value?

A (i) only
B (ii) only
C (i) and (ii) only
D (i), (ii) and (iii) **(2 marks)**

22.22 **The following question is taken from the December 2012 exam paper.**

A company uses a standard absorption costing system. The following figures are available for the last accounting period in which actual profit was $108,000.

	$
Sales volume profit variance	6,000 adverse
Sales price variance	5,000 favourable
Total variable cost variance	7,000 adverse
Fixed cost expenditure variance	3,000 favourable
Fixed cost volume variance	2,000 adverse

What was the standard profit for actual sales in the last accounting period?

A $101,000
B $107,000
C $109,000
D $115,000 **(2 marks)**

(Total = 44 marks)

Important note

You have now reached the end of the multiple choice questions for Standard costing (Chapters 20 to 22). Make sure that you practise the multi-task questions on Standard costing in Section 31. The real exam will contain three 10-mark multi-task questions on Budgeting, Standard costing and Performance measurement.