Harrington LTD

2022

Step By Step Approach

PART A

Part A is asking you to calculate a production budget in units. This is how many units need to be made for each product. The layout will be the following

Α.	Sales in units	These figures are usually taken from the question - sales are expected		
		to be.		
В.	Add Closing	1. There will be a certain percentage of stock to be		
	stock	increased/decreased. This will usually be given at the start of the		
		question		
		2. It will be calculated by using stock of finished goods on the 01.01		
		and increasing/reducing it by the percentage given at the start of		
		the question		
С.		Add the figure for A and B together		
D.	Less Opening	1. This figure will be given in the question		
	Stock	2. It can be identified by the sentence - 'Stock of finished goods on		
		the 01/01/ xx are expected to be		
E.	Required for	1. Take the figure for D away from the figure calculate for C		
	Production	2. This figure will be used later on in the questions		

Sales

Take these figures from the question

1. These figures are taken straight from the question

	Golden	Portland
Sales are expected to be	15,200	8,400

Taken from the question

Tip - Make sure to use the finished goods figures

Closing Stock

An adjustment is needed here

1. It the question is says the following about closing stock

'all stock are to be <u>decreased</u> by 10% from their opening levies by 31/12/2023 and are valued

using FIFO method.'

Workings

And

Tip - Make sure to use the finished goods figures

'Stock of finished goods on 01/01/2023 are expected to be'

Golden	900 units @ €210 each
Portland	750 units @ €290 each

Taken form the question

- This means that at the end of the year the opening stock figure for each product will have decreased by 10%.
- The following workings show you how to calculate the closing stock figure for each product

C . I .I ...

Exam Tip - Exam Tip -Make sure to look out for if the closing stock will increase or decrease

		Golden		
Opening Stock	900	as per question	Opening Stock	900
Rate of reduction	10%	as per question	Reduction	<u>90</u>
900 * 10%	= 90		Cl. Stock	810
		Portland		
Opening Stock	750	as per question	Opening Stock	750
Rate of reduction	10%	as per question	Reduction	<u>75</u>
750 * 10%	= 75		Cl. Stock	625

	Golden	Portland
Sales are expected to be	15,200	8,400
Add Closing Stock	810	625
	16,010	9,075

NOTE - Remember to add these two figures together to get the total (15,200 + 810 = 16,010 and 8,400 + 625 = 9,075)

Opening Stock

Take these figures from the question

1. The question says the following about the opening stock figures for finished goods

' Stock of finished goods on 01/01/2023 are expected to be'

Golden	900 units @ €210 each
Portland	750 units @ €290 each

Taken from the question

2. This means that the opening stock figure for Golden is 900 units and for Portland it is 750

	Golden	Portland
Sales are expected to be	15,200	8,400
Add Closing Stock	810	625
	16,010	9,075
Less Opening Stock	900	750

Budget production in units

Take these figures from previous figures (workings)

1. The formula to calculate the units needed for production is

Sales + Closing stock - Opening Stock = Required for production

- 2. These figures will be used for Part B Prepare a raw materials purchases budget (in units
 - and €)

Production budget for Harrington Ltd in units				
	Golden	Portland		
Sales are expected to be	15,200	8,400		
Add Closing Stock	810	625		
	16,010	9,075		
Less Opening Stock	(900)	(750)		
Budget Production in Units	15,110	8,325		

NOTE - Remember to take these two figures away from each other to get the total (16,010 - 900 = 15,110 and 9,075 - 750 = 8,325)

NOTE - Remember to include the heading - Production budget for Harrington Ltd

Exam Tip - You can do the workings on the statement or on a calculator - there is no need for the workings Exam Tip - Make sure to use the figures for finished goods and not raw materials

Harrington LTD (2022)

<u>Tutorial Video</u>



PART B

Part B is asking you to calculate the raw materials purchases budget. This is how much of a certain material is needed each to produce the two products. The units from part A will be used as part of working. The layout is similar to Part A and look like this

Α.	Required for	1.	A working will be needed to find out what the total figure is
	Production		required o the material for each product
В.	Add Closing	1.	There will be a certain percentage of opening stock that will need
	stock		to be decreased to get the closing stock figure. This will usually be
			given at the start of the question.
		2.	Make sure to use the <u>stock of raw materials</u> figure that is given in
			the question.
		3.	This stock of raw material figure will be reduce by the percentage
			to decrease closing stock by.
С.	Less Opening	1.	This figure will be given in the question
	Stock	2.	Make sure to use the <u>stock of raw materials</u> figure that is given in
			the question.
		Tip	o - This is the same figure that you used in b above to calculate the
		clo	sing stock figure
D.	Forecasted	1.	This figure is usually calculate by using the opening stock figure
	Purchases of		and taking it away from the figure above it
	Raw Material in		
	Kgs		
E.	Purchase price	1.	This figure will usually be given in the question
		2.	Make sure to use the figure that say the expected prices for raw
			materials during the year are
F.	Forecasted	1.	This figure is got by multiplying D by E
	Purchases of		
	Raw Material in		
	€		

Required for production

An adjustment is needed here

1. The figures for the budget production in units for both products are taken form part A

Production budget for Harrington Ltd in units				
	Golden	Portland		
Budget Production in Units	15,110	8,325		

Taken from part A

2. In the question it says the following about raw materials

'Both products use the same raw materials and skilled labour but in different quantities per unit

	Golden	Portland
Material A	6 kgs	8 kgs
Material B	9 kgs	12 kgs
Skilled Labour	6 Hours	9 Hours

as follows'

Taken from the question

3. Use the following information to complete the working (We are interested in the material figure)

4. The working to calculate these figures will look something like this

<u>Workings</u>

<u>Golden</u>

<u>Material A</u>		
Production Units	15,110	as per Part A
Required in kgs	<u>* 6</u>	as per question
	90,660	
<u>Material B</u>		
Production Units	15,110	as per Part A
Required in kgs	<u>* 6</u>	as per question
	135,990	

<u>Portland</u>

<u>Material A</u>		
Production Units	8,325	as per Part A
Required in kgs	<u>* 8</u>	as per question
	66,600	
<u>Material B</u>		
Production Units	8,325	as per Part A
Required in kgs	<u>* 12</u>	as per question
	99,900	

	Material A	Material B
A. Required for Production		
Golden	90,660	135,990
Portland	66,600	99,900
	157,260	235,890

NOTE - Remember to add these two figures together to get the total (90,660 + 66,690 = 157,260 and 135,990 + 99,900 = 235,890)

Closing Stock

An adjustment is needed here

1. In the question it says

"all stock are to be decreased by 10% from their opening levels by 31/12/2023"

2. Make sure to use the opening stock figure for raw materials that are given in the question.

Stock of raw materia	on 01/01/2023 are	expected to be'
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Material A	9,400 Kgs @ €5.50 per Kg
Material B	6,800 Kgs @ €6.50 per Kg

Taken from the question

3. The working to calculate these figures will look something like this

Exam Tip - Make sure to use the figures for raw materials and not finished goods

Working

Opening Stock	9,400	as per question	Ор	ening Stock	9,400
Rate of reduction	<u>10%</u>	as per question	Re	duction	<u>940</u>
	940				8,460
<u>Material B</u>					
Opening Stock	6,800	as per question	Ор	ening Stock	6,800
Rate of reduction	<u>10%</u>	as per question	Reduction		<u>680</u>
	680				6,120
				Material A	Material B
A. Requir	red for Pr	oduction		Material A	Material B
A . Requir Golden	red for Pr	oduction		Material A 90,660	Material B 135,990
A . Requir Golden Portland	red for Pr	oduction		Material A 90,660 66,600	Material B 135,990 99,900
A. Requir Golden Portland	red for Pr	roduction		Material A 90,660 66,600 157,260	Material B 135,990 99,900 235,890
A. Requir Golden Portland B. Add c	red for Pr	roduction		Material A 90,660 66,600 157,260 8,460	Material B 135,990 99,900 235,890 6,120

NOTE - Remember to add these two figures together to get the total (157,260 + 8,460 = 165,720 and 235,890 + 6,120 = 242,010)

Opening stock

Take these figures from the question

1. The question says the following about the opening stock figures for raw materials

' Stock of raw materials a	n 01/01/2023	are expected to be
----------------------------	--------------	--------------------

Material A	9,400 Kgs @ €5.00 per Kg
Material B	6,800 Kgs @ €6.50 per Kg

Taken from the question

2. This means that the opening stock figure for raw material for material A is 9,400 kgs and for material B it is 6,800 kgs

	Material A	Material B
A. Required for Production		
Golden	90,660	135,990
Portland	66,600	99,900
	157,260	235,890
B. Add closing stock	8,460	6,120
	165,720	242,010
C. Less Opening Stock	(9,400)	(6,800)

Forecasted purchases of raw material in Kgs

Use the figures in your answer

1. To calculate the forecasted purchase of raw material in kgs figure you add the opening stock figure and the previous figure together

	Material A	Material B
A. Required for Production		
Golden	90,660	135,990
Portland	66,600	99,900
	157,260	235,890
B. Add closing stock	8,460	6,120
	165,720	242,010
C. Less Opening Stock	(9,400)	(6,800)
D. Forecasted purchases of raw material in Kgs	156,320	235,210

Purchase Price

Take these figures from the question

1. The question says the following about the purchase price for raw materials

' The expected price for raw materials during 2023 are

Material A	€5.50 per Kg
Material B	€7.00 per Kg

Taken from the question

2. Use these figures for the purchase price - Material A €5.50 and Material B €7.00

		Material A	Material B
A .	Required for Production		
Go	lden	90,660	135,990
Por	rtland	66,600	99,900
		157,260	235,890
В.	Add closing stock	8,460	6,120
		165,720	242,010
С.	Less Opening Stock	(9,400)	(6,800)
D.	Forecasted purchases of raw material in Kgs	156,320	235,210
E.	Purchase Price	€5.50	€7.00

NOTE - Remember to multiply these two figures to the forecasted of raw materials in € figure

Forecasted Purchases of Raw Materials €

Use the figures in your answer

 To calculate the forecasted purchase of raw material in € figure you multiple the expected price figure and the previous figure

Raw material purchases budget (in units and ${\mathfrak C}$) for Harrington Ltd			
	Material A	Material B	
A. Required for Production			
Golden	90,660	135,990	
Portland	66,600	99,900	
	157,260	235,890	
B. Add closing stock	8,460	6,120	
	165,720	242,010	
C. Less Opening Stock	(9,400)	(6,800)	
D. Forecasted purchases of raw material in Kgs	156,320	235,210	
E. Purchase Price	€5.50	€7.00	
F. Forecasted purchase of raw material in €	859.760	1,646,470	

NOTE - Remember to include the heading - Raw material purchases budget (in units and €) for Harrington Ltd

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Harrington LTD (2022)

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PART C

Part C is asking you to Prepare a production cost / manufacturing budget. The layout for this is

the same layout as a manufacturing account and will look like the following

Manufacturing budget for Harrington Ltd for year ended				
31.12.23	31.12.23			
Direct Materials				
Opening stock raw materials		×		
Add Purchase of raw materials		×		
		×		
Less Closing stock raw materials		(x)		
Cost of raw materials consumed		×		
Direct Labour				
Cost of labour		×		
Variable Overheads				
Variable Overhead		×		
Fixed Overheads				
Fixed Overheads		×		
Cost of Manufacture		×		

Opening stock raw materials

An adjustment is needed here

- 1. We need to calculate the total figure in euros for opening stock of raw materials
- 2. To do this we will need a working using the information for raw material units and price per kgs
- 3. The question says the following about raw materials

'Stock of raw materials on 01/01/2023 are expected to be'

Material A	9,400 Kgs @ €5.00 per Kg
Material B	6,800 Kgs @ €6.50 per Kg

Taken from the question

Production Budge	t				Harrington LTD (2022)
<u>Workings</u> <u>Material A</u> Kgs Price per Kgs	9,400 <u>(×) €5.00</u> €47,000	Taken from ti Taken from ti Opening stock	he question he question (raw materials	Exam Tip - the price the yea	Make sue to use for the start of ar - 01/01/23
<u>Material B</u> Kgs Price per Kgs	6,800 <u>(×) €6.50</u> €44,200	Taken from th Taken from th Opening stock	he question he question < raw materials		
	Direct Materials Opening stock raw Material A	materials	47,000		

NOTE - Remember to add these two figures together to get the total (47,000 + 44,200 = 91,200)

Purchases raw materials

44,200

Use the figures from Part B

Material B

1. The figure for purchases raw material has already been calculated in Part B

2. Use the total figure for material A - 859,760 and material B - 1,646,470

Direct Materials		
<u>Opening stock raw materials</u>		
Material A	47000	
Material B	44,200	91,200
Add Purchase of raw materials		
Material A	859,760	
Material B	1,646,470	2,506,230

NOTE - Remember to add these two figures together to get the total (859,760 + 1,646,470 = 2,506,230)

Closing stock raw materials

An adjustment is needed here

- 1. We need to calculate the total figure in euros for closing stock of raw materials
- To do this we use the figure for closing stock that has been calculated in part B material A 8,460 and material B 6,120
- 3. The question says the following about raw materials

Material A

Material B

'the expected prices of raw materials during 2023 are'

	Material	A	€5.00 per Kg]	
	Material	В	€7.00 per Kg		
			Taken from the qu	uestion	
<u>Workings</u>				Exam Tip	o - Make use to
<u>Material A</u>				use the ex	pected price for
Kgs	8,460	Taken fro	m Part B	raw mater	are
Price per Kgs	<u>(x)€5.50</u>	Taken fro	m the question		
	€46,530	Closing sta	ock raw materials		
<u>Material B</u>					
Kgs	6,120	Taken from	m the question		
Price per Kgs	<u>(x)€7.00</u>	Taken fro	m the question		
	€42,840	Opening st	tock raw materials		
	Direct Materials				
	<u>Opening stock raw r</u>	naterials			

<u>Add Purchase of raw materials</u>		
Material A	859,760	
Material B	1,646,470	2,506,230
Less Closing stock raw materials	-	
Material A	46,530	
Material B	42,640	(89,370)

47000

44,200

91,200

NOTE - Remember to add these two figures together to get the total (46,4530 + 42,640 = 89,370). Take the closing stock figure 57,570 away

Cost of raw materials consumer

An adjustment is needed here

1. To calculate the cost of raw materials consumer we use the following formula

Total figure for opening stock + total figure for purchases - total figure for closing stock

Direct Materials		
Opening stock raw materials		
Material A	47000	
Material B	44,200	91,200
Add Purchase of raw materials		
Material A	859,760	
Material B	1,646,470	2,506,230
Less Closing stock raw materials		
Material A	46,530	
Material B	42,640	(89,370)
Cost of raw materials consumed		2,508,060

Direct Labour

An adjustment is needed here

- 1. We need to calculate the cost of the direct labour for making the 2 products (Use the units calculated in Part A)
- 2. To do this we will need a working using the information for raw material skilled labour
- 3. The question says the following about raw materials

'The skilled labour rate is expected to be €18.00 per hour'

and

"both products use the same raw materials and skilled labour but in different quantities per

unit as follows'

	Golden	Portland
Material A	6 kgs	8 kgs
Material B	9 kgs	12 kgs
Skilled Labour	6 Hours	9 Hours

Taken from the question

Workings

Exam Tip - Make use to use hours needed (skilled Labour) and the labour rate per hour

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<u>Golden</u>

Budget production in units	15,110	Taken from Part A
Skilled hours needed	<u>(x) 6</u>	Taken from the question
	90,660	Hours needed
Skilled labour rate	<u>(x) €18.00</u>	Taken from the question
	1,631,880	

<u>Portland</u>

Budget production in units	8,325	Taken from Part A
Skilled hours needed	<u>(x) 9</u>	Taken from the question
	74,925	Hours needed
Skilled labour rate	<u>(x)€18.00</u>	Taken from the question
	1,348,650	

Direct Materials		
<u>Opening stock raw materials</u>		
Material A	47000	
Material B	44,200	91,200
Add Purchase of raw materials		
Material A	859,760	
Material B	1,646,470	2,506,230
Less Closing stock raw materials		89,370
Material A	46,530	
Material B	42,840	89,370
Cost of raw materials consumed		2,508,060
Direct Labour		
<u>Cost of labour</u>		
Golden	1,631,880	
Portland	1,348,650	2,980,530

Variable Overheads

An adjustment is needed here

Remember - variable overhead means the more you produce a unit of a product the overheads to produce the product increase.

- 1. We need to calculate the total variable overheads for making the 2 products (Use the units calculated in Part A)
- 2. To do this we will still use the information for calculating labour cost but this time we will multiply by the variable rate instead of the skilled labour rate
- 3. The question says the following about variable overheads

Variable	€12.00	Per skilled labour hour
Fixed	€579,550	Per annum

'production overhead costs are expected to be:

Taken from the question

and

"both products use the same raw materials and skilled labour but in different quantities per

unit as follows'

	Golden	Portland
Material A	6 kgs	8 kgs
Material B	9 kgs	12 kgs
Skilled Labour	6 Hours	9 Hours

Taken from the question

<u>Workings</u>

<u>Golden</u>

Budget production in units	15,110	Taken from Part A
Skilled hours needed	<u>(x) 6</u>	Taken from the question
	90,660	Hours needed
Skilled labour rate	<u>(x)€12.00</u>	Taken from the question
	1,087,920	

Exam Tip – This is the same working as the direct labour working except, we use the variable rate per skilled labour hour Exam Tip - Make use to use hours needed (skilled Labour) and the variable rate per skilled labour hour

<u>Portland</u>

Budget production in units	8,325	Taken from Part A
Skilled hours needed	<u>(x) 9</u>	Taken from the question
	74,925	Hours needed
Skilled labour rate	<u>(x)€12.00</u>	Taken from the question
	899,100	

Direct Materials		
Opening stock raw materials		
Material A	47000	
Material B	44,200	91,200
Add Purchase of raw materials		
Material A	859,760	
Material B	1,646,470	2,506,230
Less Closing stock raw materials		89,370
Material A	46,530	
Material B	42,840	89,370
Cost of raw materials consumed		2,508,060
Direct Labour		
<u>Cost of labour</u>		
Golden	1,631,880	
Portland	1,348,650	2,980,530
Variable Overheads		
Golden	1,087,920	
Portland	899,100	1,987,020

Fixed Overheads

Take these figures from the question

- 1. These figures are taken straight from the question
- 2. The question says the following about fixed overheads

'production overhead costs are expected to be:

Variable	€12.00	Per skilled labour hour
Fixed	€579,550	Per annum

Taken from the question

3. We use the figure of €579,550 as the fixed overhead figure

Direct Materials		
<u>Opening stock raw materials</u>		
Material A	47000	
Material B	44,200	91,200
Add Purchase of raw materials		
Material A	859,760	
Material B	1,646,470	2,506,230
Less Closing stock raw materials		89,370
Material A	46,530	
Material B	42,840	89,370
Cost of raw materials consumed		2,508,060
Direct Labour		
<u>Cost of labour</u>		
Golden	1,631,880	
Portland	1,348,650	2,980,530
Variable Overheads		
Golden	1,087,920	
Portland	899,100	1,987,020
Fixed Overheads		
Fixed Overheads		579,550

Cost of manufacture

An adjustment is needed here

 To calculate the cost of manufacture we add up the following totals - cost of raw material consumed + cost of labour + variable overheads + fixed overheads
2,508,060 + 2,980,530 + 1,987,020 + 579,550 = 8,055,160

Production cost/manufacturing budget for Harrington LTD			
for year ended 31/12/2023			
Direct Materials			
<u>Opening stock raw materials</u>			
Material A	47000		
Material B	44,200	91,200	
Add Purchase of raw materials			
Material A	859,760		
Material B	1,646,470	2,506,230	
Less Closing stock raw materials		89,370	
Material A	46,530		
Material B	42,840	89,370	
Cost of raw materials consumed		2,508,060	
Direct Labour			
<u>Cost of labour</u>			
Golden	1,631,880		
Portland	1,348,650	2,980,530	
Variable Overheads			
Golden	1,087,920		
Portland	899,100	1,987,020	
Fixed Overheads			
Fixed Overheads		579,550	
Cost of Manufacture		8,055,160	

NOTE - Remember to include the heading - Production cost/manufacturing budget for Harrington LTD for year ended 31/12/2023

<u>Tutorial Video</u>



PART D

Part D is asking you to prepare a budget trading account but first you must calculate the closing stock value <u>per unit</u> for each product (Golden and Portland). You will use the same headings as part C but we will be working out the <u>figure per unit</u> and NOT the total figure.

Cost Per Unit

The budget will look like the following

Unit cost per unit closing stock			
	Product 1		Product 2
Direct Materials			
Material A	×		×
Material B	×		×
Direct Labour			
Cost of labour	×		×
Variable Overheads			
Variable Overhead	×		×
Fixed Overheads			
Fixed Overheads	×		×
Cost per unit	×		×

Direct Material

A calculation is needed here

- 1. To find out the figure per unit for direct materials we need to use how much is needed in kgs for material A and material B and multiply it by the cost of this material per Kg
- 2. The information that we need from the question will be as follows

' both products use the same raw materials and skilled lobour but in different quantities per unit

	Golden	Portland
Material A	6 kgs	8 kgs
Material B	9 kgs	12 kgs
Skilled Labour	6 Hours	9 Hours

as follows'

Taken from the question

And

'The expected price for raw materials during 2023 are'

Material A	€5.50 per kg
Material B	€7.00 per kg

Taken from the question

<u>Workings</u>

<u>Golden</u>		
<u>Material A</u>		
Kgs per unit	6	Taken from question
Price per kg	<u>(x) €5.50</u> €33	Taken from question
<u>Material B</u>		
Kgs per unit	9	Taken from question
Price per kg	<u>(×) €7.00</u> €63	Taken from question
<u>Portland</u>		
<u>Material A</u>		
Kgs per unit	8	Taken from question
Price per kg	<u>(x)€5.50</u>	Taken from question
	€44	

<u>Material B</u>

Kgs per unit	12	Taken from question
Price per kg	<u>(x)€7.00</u>	Taken from question

	Golden	Portland
Direct Materials		
Material A	33	44
Material B	63	84

Direct Labour

A calculation is needed here

- 1. To find out the figure per unit for direct labour we need to multiply the skilled hours needed by the skills hours rate
- 2. The information that we need from the question will be as follows

' both products use the same raw materials and skilled lobour but in different quantities per unit

as follows'

	Golden	Portland
Material A	6 kgs	8 kgs
Material B	9 kgs	12 kgs
Skilled Labour	6 Hours	9 Hours

Taken from the question

And

'The skilled labour rate is expected to be €18.000 per hour'

<u>Workings</u>			Tip - Remember to use the
<u>Golden</u>			skilled labour hours for both
Skilled labour required	6	Taken from question	producis
Skilled labour rate	<u>(x) €18.00</u>	Taken from question	
	€108		
<u>Portland</u>			
Skilled labour required	9	Taken from question	
Skilled labour rate	<u>(x) €18.00</u>	Taken from question	

€162

	Golden	Portland
Direct Materials		
Material A	33	44
Material B	63	84
Direct Labour		
Cost of labour	108	162

Variable Overheads

A calculation is needed here

- 1. To find out the figure per unit for variable overhead we need to multiply the skilled hours needed by the variable overhead rate per product
- 2. The information that we need from the question will be as follows

' both products use the same raw materials and skilled lobour but in different quantities per unit

as follows'

	Golden	Portland
Material A	6 kgs	8 kgs
Material B	9 kgs	12 kgs
Skilled Labour	6 Hours	9 Hours

Taken from the question

And

'Production overhead costs are expected to be:'

Variable	€12.00	Per skilled labour hour
Fixed	€579,550	Per annum

Taken from the question

<u>Workings</u> <u>Golden</u>		Tip – Remember to use the skilled labour hours for both products
Skilled labour required	6	Taken from question
Variable rate per skilled labour hour	<u>(x) €12.00</u> €72	Taken from question
Portland		
Skilled labour required	9	Taken from question
Variable rate per skilled labour hour	<u>(x) €12.00</u> €108	Taken from question

	Golden	Portland
Direct Materials		
Material A	33	44
Material B	63	84
Direct Labour		
Cost of labour	108	162
Variable Overheads		
Variable Overhead	72	108

Fixed Overheads

A calculation is needed here

- 1. To find out the figure per unit for fixed overhead we need divide the figure for fixed overheads by the total hours needed to product a unit of Golden and Portland.
- 2. The information that we need from the question will be as follows

Production overhead costs are expected to be:'

Variable	€12.00	Per skilled labour hour	
Fixed	€579,550	Per annum	

Taken from the question

And

' both products use the same raw materials and skilled lobour but in different quantities per unit

as follows'

	Golden	Portland
Material A	6 kgs	8 kgs
Material B	9 kgs	12 kgs
Skilled Labour	6 Hours	9 Hours

Taken from the question

3. Remember the budget production in units will be taken from part A - Golden 15,110 units and Portland 8,325 units

Note - The formula needed is

Fixed overheads

Total Hours

Tip – Total hours = budget production units * skilled labour

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Harrington LTD (2022)

Working

Formula		Fixed overheads		
		Tota	l Hours	
<u>Total Hours per unit</u> <u>Golden</u>				Tip - Remember to use the skilled labour hours for both
Units required	15,110	Taken from Pa	irt A	products
Skilled labour	<u>(*) 6</u>	Taken form qu	lestion	
Total Hours needed	90,660)		
Portland				
Units required	8,325	Taken from Pa	irt A	
Skilled labour	<u>(*) 9</u>	Taken from qu	lestion	
Total Hours needed	74,925	i		
Total hours required f	or Golde	en and Portland		
	90,660	+ 74,925 = 165	5,585	
Formul	a		<u>Fixed overheads</u> Total Hours	
=			<u>579,550</u>	
			165,585	
Fixed	Overhea	d per unit	€3.50	
<u>Golden</u>				Tip - Remember to use the
Skilled Hours		6	Taken from question	skilled labour hours for both products
Fixed Overhead per u	nit	<u>(*) 3.50</u>	Taken from above	
Fixed overhead per un	i†	21		

31.50

<u>Portland</u>

Skilled Hours	9
Fixed Overhead per unit	<u>(*) 3.50</u>

Fixed overhead per unit 31.50 Golden Portland **Direct Materials** Material A 33 44 Material B 63 84 Direct Labour Cost of labour 108 162 Variable Overheads Variable Overhead 72 108 Fixed Overheads

Taken from question

Taken from above

Cost per unit

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Take the figures from the question

Fixed Overheads

1. To calculate the cost per unit figure for Golden and Portland we add the following total

figures - Direct materials + direct labour + variable overheads + fixed overheads

Unit cost per unit closing stock			
	Golden		Portland
Direct Materials			
Material A	33		44
Material B	63		84
Direct Labour			
Cost of labour	108		162
Variable Overheads			
Variable Overhead	72		108
Fixed Overheads			
Fixed Overheads	21		31.50
Cost per unit	297.00		429.50

Budget Trading Account

The second part of Part D is to prepare the budget trading account is the same layout as

Question 1 and will look something like this. Remember to use the closing stock figure per unit from the above working

Budget trading account for Harrington LTD for year ended		
31/12/2023		
Sales		×
Less Cost of Sales		
Opening stock	×	
Add Cost of manufacturing	×	
	×	
Less Closing Stock	×	(x)
Gross Profit		×

Sales

A calculation is needed here

- 1. To calculate the sales revenue figure for the trading account we need to use the expected units to be sold and multiply it by the price to be charged for each product
- 2. This information will usually be given at the start of the question
- 3. The information that we need from the question will be as follows

'It expects to sell two products - Golden at €360 and Portland at €410'

And

	Golden	Portland
Sales are expected to be:	15,200 units	8,400 unit <i>s</i>

Working

<u>Golden</u>

Expected Sales	15,200	taken from question
Selling Price	€360	taken from question
	€5,472,000	Sale revenue for Golden

Production Budget			Harrington LTD (2022)
<u>Portland</u>			
Expected Sales	8,400	taken from question	
Selling Price	<u>€410</u>	taken from question	
	€3,444,000	Sale revenue for Golden	
<u>Total Sales Revenue</u>			
Golden	€5,472,000	see working above	
Portland	<u>€3,444,000</u>	see working above	
Total	€8,916,000	Total sale revenue figure	
Sales			8,916,000

Opening Stock

A calculation is needed here

- 1. To calculate the total opening stock figure for the trading account we needed to use the opening stock figure in the question and multiply it by the value of the opening stock
- 2. The information that we need from the question will be as follows

'stock of finished good on 01/01/2023 are expected to be:'

Golden	900 units at €210
Portland	750 units at €290

Working			Tip - Remember to use the
<u>Golden</u>			figure for finished goods
Expected opening stock	900	taken from question	and not raw materials
Value of opening stock	(*) <u>€210</u>	taken from question	
	€189,000	Opening stock value Go	olden
<u>Portland</u>			
Expected opening stock	750	taken from question	
Value of opening stock	(*) <u>€290</u>	taken from question	
	€217,500	Opening stock value Go	olden

Total opening stock figure

Golden	€189,000	see working	above	
Portland	<u>€217,500</u>	see working	above	
Total	€406,500	Total opening	g stock figure	
	Sales			8,916,000
	Less Cost of Sales			
	Opening stock		406.500	

Purchases (Cost of manufacture)

Take these figures from part C

1. The figure for purchases (cost of manufacture) is already calculate as part of Part C -

€8,055,160

Sales		8,916,000
<u>Less Cost of Sales</u>		
Opening stock	406,500	
Add Cost of Manufacture	(+) 8,055,160	
	8,461,660	

Note - Remember to add the opening stock figure and the cost of manufacture figure together €406,500 + €8,055,160 = €8,461,660

Closing Stock

A calculation is needed here

- To calculate the closing stock figure we use the closing stock figures from Part A (Golden - 810 and Portland - 675)
- 2. We then multiply these figures by the cost per unit figure for both products. These were calculate at the start of this part (Part D)

Working

<u>Golden</u>

Closing stock	810	taken from Part A
Cost per unit	<u>(*)</u> €297	Calculate at the start of this part (Part D) $% \left(\left({{{\left({{{{\rm{A}}}} \right)}}} \right)$
	€240,570	Closing stock value Golden

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Production BudgetHarrington LTD
(2022)PortlandImage: Closing stock675taken from Part ACost per unit $(*) \notin 429.50$ Calculate at the start of this part (Part D)
 $\notin 289,013.50$ Closing stock value Golden

Total closing stock figure

Golden	€240,570.00	see working above
Portland	<u>€289,013.50</u>	see working above
Total	€530482.50	Total opening stock figure

Sales		8,916,000
Less Cost of Sales		
Opening stock	406,500	
Add Cost of Manufacture	(+) 8,055,160	
	8,461,660	
Less Closing Stock	(530,482.50)	7,931,177.50

NOTE - Remember to take the closing stock figure away from the previous figure (€8,461,660 - €530,482.50)

Gross Profit

Take the figures from the question

1. To calculate the Gross Profit figure for Golden and Portland take these two figure away from each other 8,926,000 - 7,931,177.50

Budget trading account for Harrington Ltd for year ended					
31.12.2023					
Sales			8,916,000		
Less Cost of Sales					
Opening stock		406,500			
Add Cost of Manufacture		(+) 8,055,160			
		8,461,660			
Less Closing Stock		(530,482.50)	7,931,177.50		
Gross Profit			984,822.50		

NOTE - Remember to include the heading - Budgeted Trading account Harrington Ltd for year ended 31.12.23

Harrington LTD (2022)

<u>Tutorial Video</u>



PART E

This is the theory part of the question and includes the following

(i) Outline why budgetary control is necessary in an organisation

- 1. Budgets are a road map for a business and help them to achieve their objectives
- 2. It provides direction and motivation to staff to help them achieve their targets
- 3. To help identify future costs and revenue in order to plan cash inflows and control costs
- 4. To help production level to be achieved by preparing a raw materials budget
- 5. To ensure that there is enough staff in all areas so that order will be meet
- 6. To ensure that resources are use effectively and to be capable to changing in circumstances
- 7. To compare budget figure with actual figures and identify variances
- (ii) In relation to budgets, explain what is meant by a favourable variance and give an example of how it might arise in the direct costs of a manufacturing firm

A favourable variance occurs when actual cost are less that budget costs.

A favourable cost might arise for the following reasons

- The purchase of raw materials is less than expected because of economics of scale or discounts on early payments
- 2. Less labour wages were required due to improved productivity from employees
- Hire cost of special equipment is less than expected due to a surplus of equipment on the rental market
- 4. Patent royalties costs are less than anticipated due to the patents coming close to their retirement date

Harrington LTD (2022)

<u>Tutorial Video</u>

