

Background Information

Willow has always wanted to work outdoors and has a passion for gardening and landscaping. She has set up her business called Harmony Gardens which specialises in any gardening related jobs around the house such as lawn mowing, hedge trimming, weeding and even water blasting pavements. She has hired additional workers, Olive and Cedar, who work in the business and they all complete similar jobs. They often complete jobs individually and therefore can complete a large number of jobs per day as a business. Willow also wants to serve her community by completing gardening work for those busy with young children, full time jobs and/or those without the ability or equipment to tend to their own gardens and lawns. She wants to also provide this service at a fair and affordable price for her clients. This is her pūtake/mission.

While Willow hopes to provide an affordable service to her clients, she has also identified that she needs to earn a profit of \$65,000 annually to remain economically sustainable.

The other landscaping businesses in the area who provide similar services are:

- Blissful Gardens who charge \$45 per hour.
- Serenity Landscapes who charge \$50 per hour.
- Zen Garden & Landscaping who charge \$55 per hour.

The maximum number of hours that Willow and her team could spend landscaping each year is 4,500.

Market research conducted shows that at the following prices, this would be the quantity demanded for hours of landscaping.

Price	Quantity demanded	Income
\$34.00	4,700	\$159,800
\$36.00	4,550	\$163,800
\$38.00	4,400	\$167,200
\$40.00	4,100	\$164,000
\$42.00	3,500	\$147,000
\$44.00	3,300	\$145,200
\$46.00	3,100	\$142,600
\$48.00	2,900	\$139,200
\$50.00	2,400	\$120,000

Here is a breakdown of their projected costs:

- Willow's workers, Olive and Cedar, are each paid a salary of \$40,000 each.
- Vehicle expenses are expected to cost \$0.90 per hour of landscaping.
- Vehicle Insurance is \$1,150 per year.

- d. Willow pays \$350 for Advertising each year through Social Media platforms.
- e. Willow also expects to pay \$2,500 during the year for Repairs & Maintenance on her tools & equipment.
- f. Supplies used for Landscaping are expected to cost \$0.40 per hour of landscaping.
- g. General Business Expenses are \$4,000 per year.
- h. Accountancy Fees are \$650 per year.
- i. The business took a loan out and the interest for the loan is \$275 for the year.

Break-Even Analysis

Expense	Variable or Fixed?
Workers' salaries	Fixed
Vehicle expenses	Variable
Vehicle insurance	Fixed
Advertising	Variable
Repairs and maintenance	Variable
Supplies used	Variable
General business expenses	Variable
Accountancy Fees	Variable
Interest on loan	Fixed

Projected Income Statement

Expense	Landscaping, Administrative or Finance cost?
Workers' salaries	Landscaping
Vehicle expenses	Landscaping
Vehicle insurance	Landscaping
Advertising	Landscaping
Repairs and maintenance	Landscaping
Supplies used	Landscaping
General business expenses	Administrative
Accountancy Fees	Administrative
Interest on loan	Finance

Determine an appropriate price for one hour of Landscaping for Harmony Gardens.

Using Sheet One, create either or both a Projected Income Statement or a Break-Even Analysis to support your decision. You may choose to use both models. Copy and paste your model(s) below.

Harmony Gardens			
Projected Income Statement for the year ended 31.3.24			
Price \$38. Hours of landscaping 4,400.			
	\$	\$	\$
Revenue/income			167,200
Less Expenses			
<i>Landscaping costs</i>			
Worker salaries	80,000		
Vehicle expenses	3,960		
Vehicle insurance	1,150		
Advertising	350		
Repairs and maintenance	2,500		
Supplies used	<u>1,760</u>	89,720	
<i>Administration costs</i>			
General business expenses	4,000		
Accounting fees	<u>650</u>	4,650	
<i>Finance costs</i>			
Interest on loan	<u>275</u>	<u>275</u>	
<i>Total expenses</i>			<u>94,645</u>
<i>Projected profit for the year</i>			<u>\$72,555</u>

Identify the price you have chosen to be used by Harmony Gardens. Fully explain why you have chosen this price.

- You must include detailed reference to your economic model(s)
- You must also use detail from the background information, including the pūtake.

I have chosen \$38 to be the price used by Harmony Gardens because my projected income statement shows it provides a total profit of \$72,555 (sales \$167,200 minus expenses \$94,645). It exceeds the profit target of \$65,000 by \$7,555 which creates a solid buffer for the business.

It is important to have a good buffer so there are extra funds available when there are unexpected expenses or less customers. Another main reason that I chose this price is because it aligns with the business' pūtake of serving the community by completing gardening work for those busy with young children, full time jobs and/or those without the ability or equipment to tend to their own gardens and lawns.

At the price of \$38 per hour the three gardeners will each work 1,466.67 - (4,400/3) hours annually, which means 28.21 hours each, per week. The 4,400 hours is 100 hours below the relevant range of 4,500 hours annually.

Harmony Gardens' price of \$38 is the cheapest service in the area. It is much more affordable than their cheapest competitor Blissful Gardens who charge \$45, followed by Serenity Landscapes at \$50 and the most expensive service provided by

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Zen Garden & Landscaping for \$55. Harmony Gardens would be undercutting the other local services by a minimum of \$7 which is a significant price difference that is likely to attract customers to the new business. As people begin to use the service, word of mouth is likely to make it more well known and increase business. Overall, I consider the price of \$38 per hour to be a sensible price for Harmony Gardens because it supports the pūtake of: providing a gardening service at a fair and affordable price for their clients, while remaining economically sustainable. It is also sensible because it is \$7 cheaper than the cheapest competitor making it more attractive e.g. because it is a lot more affordable than them. The last two reasons why it is a good price is because it is well within their workable hours, which provides some leniency if there aren't as many customers as expected. Whilst doing that it also provides the business with a \$7555 buffer, which could save this business from going bankrupt or broke, if there are any extra unexpected costs. The other prices except for \$40 do not meet most of what is said above, which means that they then become unviable prices.

One year later, the New Zealand Government raised the minimum wage which will force Willow to increase the salaries for her two additional workers. Each worker will be paid an extra \$2,000 per year.

Explain how the new raised Minimum Wage may impact the price charged by Harmony Gardens.

The wage increase is an extra cost for Harmony Gardens. In order for them to keep their profit of \$72,555 or similar, Harmony Gardens may have to get their customers to pay the extra cost by raising their service price. When I put the extra cost into my Projected Income Statement it showed the original price of \$38 was still the best option. The other options reduce the profit due to the lower price charged, - too low to make a profit and customer demand because it is becoming less affordable with higher prices, resulting in less buffer than if kept the same. My original price provides \$68,555 profit after this wage increase, meaning there is a \$3,555 buffer above the required \$65,000 profit which only goes down with the other prices.

Use a model or concept from the list below to help you determine what Harmony Gardens should do regarding their price. You need to consider at least two alternative prices. You will need to use at least one of the following models to support your decision: Break Even Analysis, Projected Income Statement, Supply and Demand.

Harmony Gardens			
Projected Income Statement for the year ended 31.3.24			
Price \$38 . Hours of landscaping 4,400 .			
	\$	\$	\$

Revenue/income			167,200
Less Expenses			
<i>Landscaping costs</i>			
Worker salaries	84,000		
Vehicle expenses	3,960		
Vehicle insurance	1,150		
Advertising	350		
Repairs and maintenance	2,500		
Supplies used	<u>1,760</u>	93,720	
<i>Administration costs</i>			
General business expenses	4,000		
Accounting fees	<u>650</u>	4,650	
<i>Finance costs</i>			
Interest on loan	<u>275</u>	<u>275</u>	
<i>Total expenses</i>			98,645
<i>Projected profit for the year</i>			\$68,555

Harmony Gardens			
Projected Income Statement for the year ended 31.3.24			
Price \$40. Hours of landscaping 4,100.			
	\$	\$	\$
Revenue/income			164,000
Less Expenses			
<i>Landscaping costs</i>			
Worker salaries	84,000		
Vehicle expenses	3,690		
Vehicle insurance	1,150		
Advertising	350		
Repairs and maintenance	2,500		
Supplies used	<u>1,640</u>	93,330	
<i>Administration costs</i>			
General business expenses	4,000		
Accounting fees	<u>650</u>	4,650	
<i>Finance costs</i>			
Interest on loan	<u>275</u>	<u>275</u>	
<i>Total expenses</i>			98,255
<i>Projected profit for the year</i>			\$65,745

Harmony Gardens

Projected Income Statement for the year ended 31.3.24 Price \$36. Hours of landscaping 4,550.			
	\$	\$	\$
Revenue/income			163,800
Less Expenses			
<i>Landscaping costs</i>			
Worker salaries	84,000		
Vehicle expenses	4,095		
Vehicle insurance	1,150		
Advertising	350		
Repairs and maintenance	2,500		
Supplies used	1,820	93,915	
<i>Administration costs</i>			
General business expenses	4,000		
Accounting fees	650	4,650	
<i>Finance costs</i>			
Interest on loan	275	275	
<i>Total expenses</i>			98,840
<i>Projected profit for the year</i>			\$64,960

Harmony Gardens Projected Income Statement for the year ended 31.3.24 Price \$42. Hours of landscaping 3,500.			
	\$	\$	\$
Revenue/income			147,000
Less Expenses			
<i>Landscaping costs</i>			
Worker salaries	84,000		
Vehicle expenses	3,150		
Vehicle insurance	1,150		
Advertising	350		
Repairs and maintenance	2,500		
Supplies used	1,400	92,550	
<i>Administration costs</i>			
General business expenses	4,000		
Accounting fees	650	4,650	
<i>Finance costs</i>			
Interest on loan	275	275	
<i>Total expenses</i>			97,475
<i>Projected profit for the year</i>			\$49,525

Explain the options you have considered. You should explain the impact that the different options would have on Harmony Gardens.

I chose the only two prices that still made Harmony Gardens a sustainable profit, \$38 and \$40.

Leave the price the same at \$38.

The original price of \$38 is good for the customers of Harmony Gardens as it is still going to be affordable for them as nothing has changed because it is the same price. It has a negative impact for Harmony Gardens because they will lose \$4,000 profit with the wage increase. However, they still have a \$3,555 buffer above the \$65,000 profit target as at this price they will make \$68,555 and before the wage increase, they made \$72,555. The original price provides the strong buffer stated above which is important to have so they remain sustainable when there are some unexpected extra costs. It also allows for some customers to not be using their service as the number of customers using their gardening service (QD) at that price is just a rough estimate. There is no change for the workers at this price, however it provides greater employment security than the higher price below because there are 300 more hours of work available annually (100 per worker) and \$2755 greater profit for the business.

Raise the price to \$40

The price of \$40, raising it \$2 from the original price is bad for the customers as it makes it less affordable to them than \$38. However, if they can still afford to pay this gardening service it is still \$5 less than the cheapest competitor, Blissful Gardens. It means that the only reason to switch to Blissful Gardens would be if they knew they did a much better job than Harmony Gardens. However, it is unlikely as Harmony Gardens now have one full year's experience and will be continually improving their gardening skills. The rise in price is also negative for Harmony Gardens as they actually end up with \$2,755 less profit than at the \$38 price. The \$40 price provides \$65,745 in profit which is only \$745 above the profit target, whereas the \$38 price provides \$68,555 in profit and is \$3,555 above the \$65,000 profit target. It is also negative for the workers. The workers don't get more money from this price rise as they are each paid a fixed salary, they will however be less happy with this price because it means that they are more likely to lose their job because of the lack of work or money to the business. All figures above have been shown or calculated with or from the projected income statement. All the reasons above prove why \$38 is best as it keeps both the customers, the workers and the business happy.

Identify the price you have chosen to be used by Harmony Gardens after the salary increase. Justify this price. You must include detailed reference to your economic model(s). You must also use detail from the background information, including the pūtake.

I have decided that the best thing for Harmony Gardens would be to keep the original price I recommended of \$38 per hour. My projected income statement

shows it still exceeds the profit target of \$65,000 by \$3,555, making a total profit of \$68,555. It requires 4400 hours which falls within the maximum hour range of 4500. A price of \$42 per hour or higher doesn't meet the profit target due to it only providing \$49,525 or less. As the business passes on the costs the price goes up and there is less customer demand for the service because of affordability. The required hours of 3,500 or less easily falls within the 4,500 relevant range. However, a price of \$36 per hour or lower doesn't meet the profit target due to it only providing \$64,960 or less. As the price goes down there is less profit because there isn't enough margin between expenses and income. It also requires a minimum of 4,550 or more hours which exceeds the maximum 4,500 hours available from the team. Although a price of \$40 per hour provides \$65,745 profit and just meets the \$65,000 required, it is a small buffer that might not be enough if there were high unexpected costs. Therefore, keeping the price remaining at the original \$38 meets the needs of all stakeholders and supports the pūtake of providing a gardening service at a fair and affordable price for their clients, while remaining economically sustainable.

Discuss the consequences of this price on both Harmony Gardens and its stakeholders (customers, workers and business/ownership).

Harmony Gardens – Keeping the price the same at \$38 per hour means the business will have a profit of \$68,555. It provides a strong buffer above the profit target of \$65,000 and greater business security with a sufficient margin for larger unexpected expenses, plus greater opportunity to expand or improve the business.

Customers – Retaining the original price of \$38 per hour helps increase/keep customer loyalty and remains well below all other local competitors' prices. The customers are happy because it is still cheap and affordable for them.

Workers – The same price per hour of \$38 for gardening services means the salary and hours worked remains the same. Having job security with this price will have a positive impact on the workers. Whereas, at \$40 there are less hours available and potential loss of job security due to reduced business income. The price of \$36 per hour or lower doesn't meet the profit target and exceeds the working hours available by the team.