

Question 3

What weekly production plan for standard and light weight compressors would result in the highest financial return for Catawba?

well as full R&D production included more text

Product	Light Weight	Standard
Number of units to be produced	10	2
Number of labor hours required per unit	62.5	30
Total Labor hours	625	60

Assumptions
The numbers have been rounded to the nearest whole number. The numbers are based on the information provided in the case. The numbers are based on the information provided in the case. The numbers are based on the information provided in the case.

Question 2

If Marge McPhee decides to manufacture 10 light weight compressors each week and to sell them at a price of \$6,000, how much better or worse off financially would Catawba be?



Presumptions

Manufacturing direct expenses

Fixed	\$100,000 per week
Variable	\$20 per unit produced
Material	\$10 per unit produced
Energy	\$5 per unit produced
Overhead	\$15 per unit produced
Transportation	\$5 per unit produced
Inventory	\$10 per unit produced

Question 1

Is the company correct in its practice of not manufacturing standard model compressors on Sundays because of the accounting loss incurred on each unit?



General information

- Catawba Industrial Company currently manufactures only standard compressors.
- The company employs almost 1,200 persons and had more than \$200 million in sales.
- Marge McPhee, general manager of the compressor-manufacturing department is considering implementing a new production run, which includes lightweight compressors.
- Marge McPhee needs to ascertain whether or not to introduce it, what volume to produce, and what price to charge.

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How many units to produce?

Product	Number of labor hours required per unit	No. of units to be produced	Total Labor hours
Light Weight Compressors	62.5	10	625
Standard Compressors	30	2	60

How many units produced?	Weekday	Saturday	Sunday
Plan 1	Light Weight	10	4
Plan 2	Light Weight	10	6
	Standard	2	-

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Question 3

What weekly production plan for standard and light weight compressors would result in the highest financial return for Catawba?

we'll see full this presentation
included more text
again.....

Product	Light Weight Compressors	Standard Compressors
Number of labor hours required per unit	42.5	100
No. of units to be produced	30	17.35
Total Labor hours	1275	1735

ANSWER
The company has to decide
through various methods
Compressors and light weight
Compressors or which one
profit.
And that is what the company
should do. The company should
produce light weight compressors and 17
standard compressors.

Question 2

If Marge McPhee decides to manufacture 10 light weight compressors each week and to sell them at a price of \$8,000, how much better or worse off financially would Catawba be?



General information

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- Marge McPhee needs to ascertain whether or not to introduce it, what volume to produce, and what price to charge.

Presumptions

When producing standard compressors

Yield	87.5%
Production rate	12 units per hour
Material cost	\$1.50 per unit
Direct labor	\$12.00 per hour
Overhead	\$1.00 per hour
Variable cost	\$14.50 per unit
Fixed cost	\$1.00 per unit
Total cost	\$15.50 per unit

Question 1

Is the company correct in its practice of not manufacturing standard model compressors on Sundays because of the accounting loss incurred on each unit?



How many units to produce?

How many units Produced?		Weekday	Saturday	Sunday
Plan 1	light Weight	-	6	4
	Standard	20	-	-
Plan 2	light Weight	-	4	6
	Standard	10	2	-

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Its a (w)RAP!**

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Presumptions

when producing standard compressors

Price	\$10,000 per unit
Production Volume	24 units per week (4 units per day)
Appliacation	10 units for paint systems 14 units sold on the market
Machine Hours	100 hours per unit
Direct Labor	50 workers
Wages & Benefits	\$ 20 per hour on weekday \$30 per hour on Saturday \$40 per hour on Sunday
Working days	Weekday + Saturday

Question 1

Is the company correct in its practice of not manufacturing standard model compressors on Sundays because of the accounting loss incurred on each unit?

We are going to find out the economic profit

Standard profit

Total Revenue	\$10.000
- Total Cost	\$10.900
= Loss	(\$900)

Lightweight profit

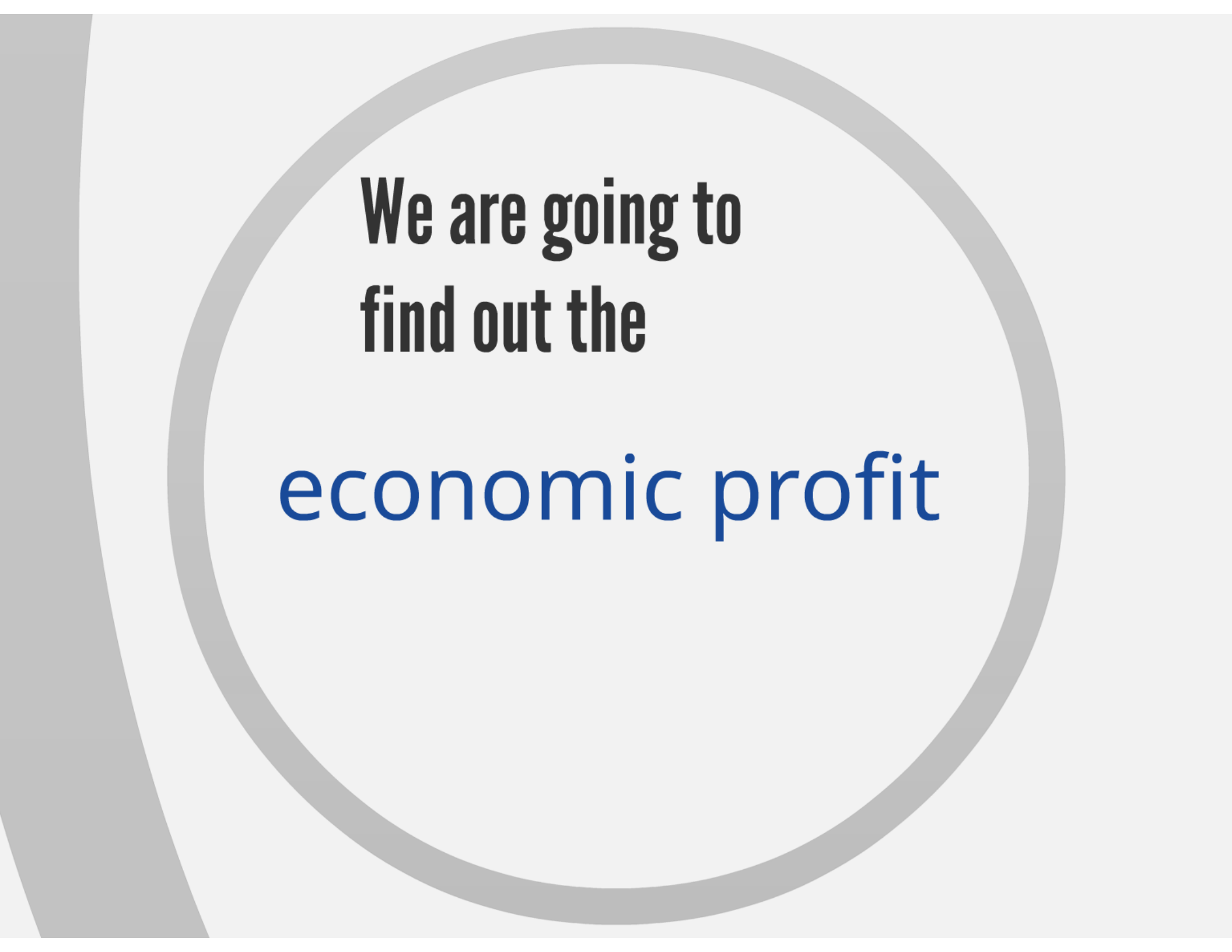
Total Revenue	\$8.000
- Total Cost	\$8.451
= Loss	\$(451)

The answer is

Economic profit of producing on Sundays

Standard profit	(\$900)
Lightweight profit	(\$451)
Total loss	(\$449)

DONT PRODUCE ON SUNDAYS!!



**We are going to
find out the
economic profit**

Standard profit

Total Revenue	\$10.000
- Total Cost	\$10.900
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= Loss	(\$900)

Economic profit

Standard

Lightweight profit

Total Revenue	\$8.000
- Total Cost	\$8.451
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= Loss	\$(451)

Sunday costs

Weekday cost	\$5.951
Add. labor cost	\$2.500
<small>(\$4000x0,625%)</small>	
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Total costs	\$8.451