

Name:			Date: _____
Teacher :	<i>Answers</i>		
	Year 7 Mathematics 2021 – Investigation 2		
Baldivis	Richie's Restaurant		
	Weighting: 15%	Due Date: _____	Mark _____ / _____
Conditions:			

Question 1.

a)

(0)

✓

b)

S

✓

(2)

Question 2.

Space to draw table arrangements to assist with completing table of values

Marks for 2 can be for correct drawings, or correct
in table of values for max total of 6 marks.

Number of joined tables (<i>t</i>)	1	2	3	4	5	6	7
Number of people seated (<i>p</i>)	6 ✓	10 ✓	14	18	22	26	30 ✓

L
W
6 ✓ 8 ✓ 10 12 14 16 18 ✓

Question 3.

$$30 \times 6 = 180$$

✓ ✓ ✓

(6)

(3)

Question 4.

Evidence of planning/drafting:

A single	9x6
2 length	10
2 width	8
3 length	14
4 length	18
4 width	12
6 width	16
<hr/>	<hr/>
30 tables	132 pax

Final answer:

30 tables ✓
132 people ✓
6pax ✓
8pax ✓
10pax ✓

132 people ✓

(5)

Question 5.

Better length ✓

Reason ✓

(2)

Question 6.

Any valid reason ✓

(1)

Question 7.

$$\text{length: } P = 4t + 2 \quad \checkmark \quad \checkmark$$

$$\text{width } P = 2t + 4 \quad \checkmark$$

(4)

Question 8.

Coefficient = side seats ✓

Constant = end seats ✓

or
any valid reason ✓✓

(2)

Question 9.

Higher coefficient for lengthways means it
will always be better. ✓

or
Any valid explanation ✓✓

(2)

Question 10.

Modify your plan (this question is asking you to draft)

✓✓ Any change to plan

o ✓

✓✓ reason why Q4 plan was the best.

(2)

Question 11.

Improved plan (this question is asking you to give a final drawing to your draft in Q10)

✓✓ Valid answers

(2)

Question 12.

Valid answer ✓

①

Question 13.

Valid answer ✓

①

Question 14.

Valid answer ✓

①

Question 15.

2 reasons eg seating requirements
✓✓ room size
class location
etc

②

End of Investigation