


Name:			Date: _____
Teacher :	S. SWEET		
 Baldivis	<b>Year 7 Mathematics 2021 – Investigation 2</b>  <b>Richie's Restaurant</b>		
	Weighting: 15%	Due Date: _____	Mark <u>  /  </u>
Conditions:			

Question 1.		
a)	10	✓
b)	8	✓

(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 (t)	1	2	3	4	5	6	7
Number of people seated (p)	6 ✓	10 ✓	14	18	22	26	30 ✓
	6 ✓	8 ✓	10	12	14	16	18 ✓

(6)

Question 3.
$  \begin{array}{ccc}  30 & \times & 6 \\  \checkmark & & \checkmark \\  & & 180 \\  & & \checkmark  \end{array}  $

(3)

Question 4.

Evidence of planning/drafting:

9x 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:

132 people

30 tables ✓

6 pax ✓

8 pax ✓

10 pax ✓

132 people ✓

(5)

Question 5.

Better length ✓  
Reason ✓

(2)

Question 6.

Any valid reason ✓

(1)

Question 7.

length:  $p = 4t + 2$   
                  ✓                  ✓  
width  $p = 2t + 4$   
                  ✓                  ✓

(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  
or

✓✓ 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