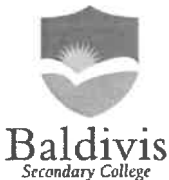
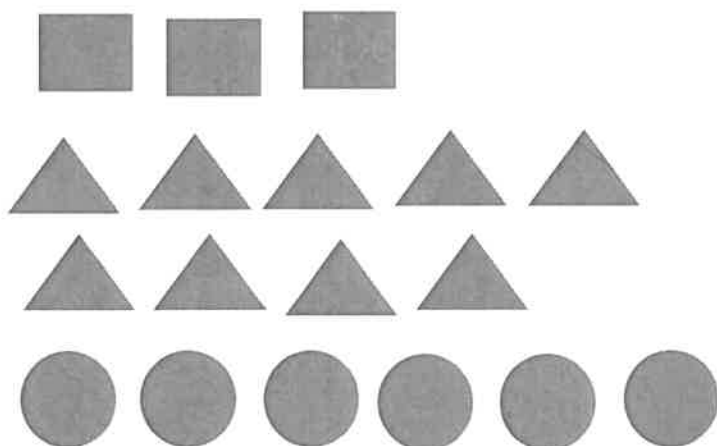


Name:	<u>Solutions</u>		Date: _____
Teacher :	_____		
	Year 7 Rates and Ratios Mini-Test		<div style="border: 1px solid black; padding: 5px; display: inline-block;"> / 20 </div>
	<u>Full working out MUST be shown to get full marks for each question.</u>		
Total Time:	20 minutes	Conditions: Calculator allowed	
Weighting:	5%		
Equipment:	1 A4 note page , calculator, pen, pencil, eraser		

1. Complete the table below by referring to the triangles, squares and circles. **Simplify the ratios as much as possible for full marks.** [6 marks]



Each question worth 1.5 marks for solution and being simplified

a) Write a ratio for circles to triangles $6:9 \rightarrow 2:3$ <i>+ 1/2 simplifying</i> ✓	b) Write a ratio for triangles to squares $9:3 \rightarrow 3:1$ <i>+ 1/2 simplifying</i> ✓
c) Write a ratio for triangles to circles to squares $9:6:3 \rightarrow 3:2:1$ <i>+ 1/2 simplifying</i> ✓	d) Write a ratio to circles to total number of shapes $6:18 \rightarrow 1:3$ <i>+ 1/2 simplifying</i> ✓

2. Simplify the following ratios [4 marks]

a) 12:24 \downarrow $1:2$ ✓	b) 14:35 $\div 7 \quad \div 7$ $2:5$ ✓	20L: 435 mL <i>converting units</i> ✓ $20,000 \text{ mL} : 435 \text{ mL}$ $4000 \text{ mL} : 87 \text{ mL}$ <i>simplify</i> ✓
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3. Create equivalent ratios by finding the missing numbers.

[2 marks]

a) $5:2 = 25:\underline{10}$ ✓

b) $280:350 = 4:\underline{5}$ ✓

4. Share 20 lollies in a ratio of 3:2

[3 marks]

$20 \div 5 = 4$ ✓

$3 \times 4 = 12$

$2 \times 4 = 8$ ✓

✓
 $3+2=5$

$12:8$ ✓

5. How much will you pay for 4.5 kg of apples, given that 2 kg cost \$3.80?

[2 marks]

$2\text{kg} = \$3.80$

$\div 2$
 $1\text{kg} = \$1.90$ ✓

$\times 4.5$ $\times 4.5$
 $4.5\text{kg} = \$8.55$ ✓

6. Compare the cost of 400 g of biscuits for \$2.48 and 500 g for \$3.10. Which is the better buy?

[3 marks]

$\$2.48$
 $\div 400\text{g}$

 $\$0.0062/\text{g}$ ✓

$\$3.10$
 $\div 500\text{g}$

 $\$0.0062/\text{g}$ ✓

✓ Both options are equal in value of unit price.

End of Test