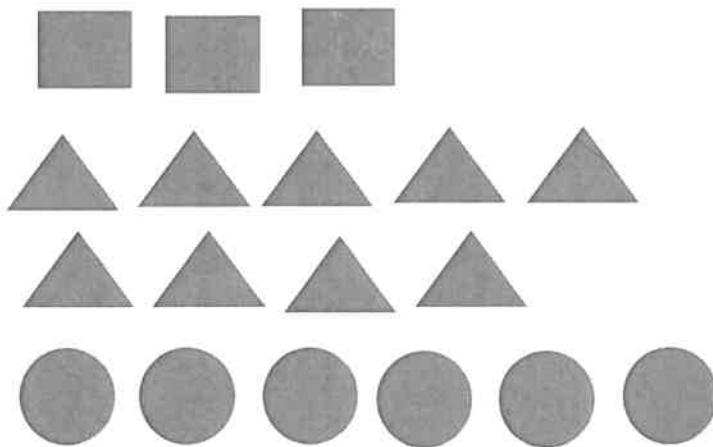


Name:	Solutions	Date:
Teacher :		
 Baldivis Secondary College	Year 7 Rates and Ratios Mini-Test	/ 20
	<u>Full working out MUST be shown to get full marks for each question.</u>	
Total Time:	20 minutes	Conditions: Calculator allowed
Weighting:	5%	
Equipment:	1 A4 note page , calculator, pen, pencil, eraser	

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	b) Write a ratio for triangles to squares
$6:9 \rightarrow 2:3$ ✓ +½ simplifying	$9:3 \rightarrow 3:1$ ✓ +½ simplifying
c) Write a ratio for triangles to circles to squares	d) Write a ratio to circles to total number of shapes
$9:6:3 \rightarrow 3:2:1$ ✓ +½ simplifying	$6:18 \rightarrow 1:3$ ✓ +½ simplifying

2. Simplify the following ratios [4 marks]

a) 12:24 ↓ 1:2 ✓	b) 14:35 ÷7 ✓ \downarrow 2:5 ✓	20L: 435 mL 20,000 mL : 435 mL 4000 mL : 87 mL converting units ✓ Simplify ✓
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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]

$20 \div 5 = 4$ ✓

$3 \times 4 = 12$
 $2 \times 4 = 8$
✓

$12:8$ ✓

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

[2 marks]

$$\begin{aligned} 2\text{kg} &= \$3.80 \\ \frac{\div 2}{1\text{kg}} &= \frac{\div 2}{\$1.90} \\ 4.5 &\times 1.90 = \$8.55 \end{aligned}$$

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]

$$\begin{array}{r} \$2.48 \\ \div 400g \\ \hline \$0.0062/g \end{array}$$

$$\begin{array}{r} \$3.10 \\ \div 500g \\ \hline \$0.0062/g \end{array}$$

✓ Both options are equal in value of unit price.