Ratio and Rate: The Five Question Types

MEMORANDUM

Name: ..... Class: .....

Date: .....

MARK ____ / 19

Answer all questions. Show all your working — marks are awarded for method as well as the final answer. **Teacher copy: accept any correct equivalent method.**

1 Simplify 15 : 25 *(simplify)* (1)

÷5 → **3 : 5** ✓ (1)

2 Simplify 24 : 36 *(simplify)* (1)

÷12 → **2 : 3** ✓ (1)

3 Share 56 sweets in the ratio 3 : 4 *(share)* (3)

7 parts → 8 each; **24 and 32** ✓✓✓ (3)

4 Share R720 in the ratio 2 : 3 : 4 *(share)* (3)

9 parts → R80 each; **R160, R240, R320** ✓✓✓ (3)

5 Complete: 3 : 4 = 15 : ? *(equivalent)* (1)

×5 → **20** ✓ (1)

6 Complete: 5 : 2 = ? : 8 *(equivalent)* (1)

×4 → **20** ✓ (1)

7 Increase 40 in the ratio 7 : 5 *(increase)* (2)

$40 \times \frac{7}{5} = \mathbf{56}$ ✓✓ (2)

8 Decrease 90 in the ratio 2 : 3 *(decrease)* (2)

$90 \times \frac{2}{3} = \mathbf{60}$ ✓✓ (2)

9 A worker earns R900 in 6 hours. Rate per hour? *(rate)* (2)

900 ÷ 6 = **R150/h** ✓✓ (2)

10 Which is cheaper: 2 kg for R50 or 3 kg for R72? *(best buy)* **(3)**

> R25/kg vs R24/kg → **3 kg pack** ✓✓✓ (3)

TOTAL: 19 marks

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