

Name \_\_\_\_\_

Date \_\_\_\_\_

## Stage 7 End-of-unit test 12

20 questions · 45 marks · calculators are not allowed · allow about 45 minutes

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- 1 Write the ratio 12 : 18 in its simplest form. [2]  
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\_\_\_\_\_
  - 2 Write the ratio 45 : 60 : 75 in its simplest form. [2]  
\_\_\_\_\_  
\_\_\_\_\_
  - 3 The ratio 3 : 5 is equivalent to 21 : n. What is n? [2]  
\_\_\_\_\_  
\_\_\_\_\_
  - 4 Write 40 cm : 1 m as a ratio in its simplest form. [3]  
\_\_\_\_\_  
\_\_\_\_\_
  - 5 In the ratio 2 : 3, what fraction of the whole is the first part? [2]  
☐ 2/3  
☐ 2/5  
☐ 3/5  
☐ 1/2
  - 6 Does the order of a ratio matter? [1]  
☐ No  
☐ Yes — 3 : 2 is not the same as 2 : 3  
☐ Only for big numbers  
☐ Only in words
  - 7 Share 20 in the ratio 2 : 3. What is the larger share? [2]  
\_\_\_\_\_  
\_\_\_\_\_
  - 8 Share \$150 in the ratio 2 : 3 : 5. What is the largest share, in dollars? [3]  
\_\_\_\_\_  
\_\_\_\_\_
  - 9 What is the first step when sharing in a ratio? [1]  
☐ Divide by the first number  
☐ Add the parts  
☐ Multiply the parts  
☐ Subtract them
  - 10 How do you check a share is right? [2]  
☐ You cannot  
☐ Add the shares and compare with the total  
☐ Divide them  
☐ Look at the ratio

- 11** Two people share money in the ratio 3 : 5. The smaller share is \$27. What is the total, in dollars? [3]
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- 12** Two shares are in the ratio 5 : 3 and differ by 16. What is the larger share? [3]
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- 13** 5 pens cost \$35. What do 8 pens cost, in dollars? [2]
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- 14** A car uses 12 litres for 96 km. How far on 20 litres, in km? [3]
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- 15** What does directly proportional mean? [2]
- ☐ One goes up as the other goes down
  - ☐ When one doubles so does the other
  - ☐ They are equal
  - ☐ They add to a fixed total
- 16** A graph of two directly proportional quantities is ... [2]
- ☐ a curve
  - ☐ a straight line through the origin
  - ☐ horizontal
  - ☐ a line missing the origin
- 17** Is a taxi fare directly proportional to the distance? [2]
- ☐ Yes
  - ☐ No
- 18** A recipe for 4 people uses 300 g of rice. How much for 10 people, in grams? [3]
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- 19** A class of 30 has boys and girls in the ratio 2 : 3. How many girls? [3]
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- 20** Paint mixes red and white in the ratio 2 : 5. For 6 litres of red, how much white, in litres? [2]
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**END OF TEST**