Strand 6 • Ratio and proportion • Unit 1 • Understanding ratio notation • Band e

Skills practice A

1 Copy the three boxes below and write each of the ratios in one of the boxes. All the ratios in each box must be equivalent.





Strand 6 • Ratio and proportion • Unit 1 • Understanding ratio notation • Band e

5 These shapes are in the ratio 1:3.

The copy is three times the size of the original.



Write down the ratio of the lengths of each of these. The original is on the left and the copy is on the right.



- 6 In a box there are 20 pink tissues and 30 white tissues.
 - **a** Write down the ratio, pink tissues: white tissues.
 - **b** Simplify the ratio.
- 7 Concrete is a mixture of cement, sand and gravel in the ratio 1:2:3.How many bags of cement and gravel are needed when four bags of sand are used?



Strand 6 • Ratio and proportion • Unit 1 • Understanding ratio notation • Band e

Skills practice B

- 1 Ben buys eight ice Iollies for £3.20.
 - a How much would four ice Iollies cost?
 - **b** How much would 12 ice Iollies cost?
- 2 Sarah buys 12 USB drives for £9.60.
 - a How much would three USB drives cost?
 - **b** How much would 15 USB drives cost?
- 3 Sam buys 12 red roses for £6.00 and 12 tulips for £4.80.
 - a How much do 18 red roses cost?
 - **b** How much do 15 tulips cost?
 - c How much do 9 red roses and 9 tulips cost together?
- 4 'Orange Fizz' is made by mixing orange juice and lemonade in the ratio 2:7. Paul has 250 ml of orange juice.
 - a How much lemonade does he need to use all the orange juice in making Orange Fizz?
 - **b** How much Orange Fizz does he make?
- 5 'Berry Nice' is made by mixing cranberry juice and tonic water in the ratio 3:5. Saskia uses 450 ml of tonic water.
 - a How much cranberry juice does she need to use all the tonic water in making Berry Nice?
 - **b** How much Berry Nice does Saskia make?
- Fruit Flip' is made by mixing fruit cordial, milk and yoghurt in the ratio 2:5:3.
 Daniel uses 220 ml of fruit cordial.
 How many millilitres of Fruit Flip does he make in total?
- 7 Sylvia has to travel 15 km to school.She walks for 500 m then catches the bus for the rest of her journey.
 - **a** Write down the ratio of the distance Sylvia walks to the distance she travels by bus.
 - **b** Simplify your answer.
- 8 In 2000, Harry was ten and Leo, his brother, was six.
 - **a** Find and simplify the ratio of their ages.
 - **b** Find and simplify the ratio of their ages in 2010.
 - c In what year will their ages be in the ratio 6:5?
 - d Will their ages ever be in the ratio 1:1? Explain your answer.

