UNIT 7   *Ratio and Proportion*   **Revision Test 7.1**
                                                              (Standard)

1.   Write each of the following ratios in its simplest form:

      (a)   5 : 15   (b)   6 : 14   (c)   3 : 12

                                                                        (6 marks)

2.   Write in the form of 1 : *n,* each of the following ratios:

      (a)   2 : 10   (b)   2 : 5   (c)   10 : 22

                                                                        (6 marks)

3.   Given that one pound sterling (£) is worth 200 Japanese Yen (Y), convert:

      (a)   £60 to Y ,

      (b)   £2.50 to Y,

      (c)   1600 Y to £ .

                                                                        (6 marks)

4.   Share £99 in the ratio 4 : 7.

                                                                        (4 marks)

5.   If 7 books cost £35, calculate the cost of:

      (a)   1 book,

      (b)   4 books,

      (c)   20 books.

                                                                        (6 marks)

6.   Sugar and flour are mixed in the ratio 1 : 3 in a recipe.
      How much sugar should be mixed with 900 grams of flour?

                                                                        (2 marks)

UNIT 7   *Ratio and Proportion*
Revision Test 7.2
(Academic)

1. Write each of the following ratios in its simplest form:

    (a)   21 : 35   (b)   42 : 49   (c)   24 : 40

    (6 marks)

2. Write in the form of 1 : *n,* each of the following ratios:

    (a)   10 : 45   (b)   5 : 8   (c)   2 : 17

    (6 marks)

3. Given that one pound sterling (£) is worth 240 Spanish Pesetas (Pta), convert:

    (a)   £8 to Pta,

    (b)   £3.50 to Pta,

    (c)   2640 Pta to £ .

    (6 marks)

4. Share £90 in the ratio 7 : 6 : 5.

    (4 marks)

5. If 9 hockey sticks cost £126, calculate the cost of:

    (a)   1 stick,

    (b)   7 sticks.

    (4 marks)

6. If Debbie drives 150 miles at 60 mph, how long does her journey take?

    (2 marks)

7. A map uses a scale of 1 : 20 000. What distance on the map would
    represent an actual distance of 2 km?

    (2 marks)

UNIT 7   *Ratio and Proportion*   **Revision Test 7.3**
                                                      (Express)

1.   Write each of the following ratios in its simplest form:

    (a)   42 : 49   (b)   60 : 150   (c)   45 : 63

(6 marks)

2.   Write in the form of 1 : *n,* each of the following ratios:

    (a)   10 : 4.7   (b)   5 : 22

(4 marks)

3.   Given that one pound sterling (£) is worth 2.4 Swiss Francs (SFr), convert:

    (a)   £40 to SFr,

    (b)   480 SFr to £,

    (c)   4.2 SFr to £ .

(6 marks)

4.   Share £198 in the ratio 3 : 6 : 9.

(4 marks)

5.   If 12 footballs cost £168, calculate the cost of:

    (a)   4 footballs,

    (b)   9 footballs

(4 marks)

6.   Debbie and Karen each drive 60 miles. Debbie drives at 40 mph and
Karen at 50 mph. How long does each journey take?

(4 marks)

7.   A map uses a scale of 1 : 25 000. What distance on the map would
represent an actual distance of 4.5 km?

(2 marks)

Revision Test 7.1 (Standard)   Answers

1. (a)   1 : 3   B2

    (b)   3 : 7   B2

    (c)   1 : 4   B2   *(6 marks)*

2. (a)   1 : 5   B2

    (b)   1 : 2.5   B2

    (c)   1 : 2.2   B2   *(6 marks)*

3. (a) $60 \times 200 = 12\,000$ Y   M1 A1

    (b) $2.5 \times 200 = 500$ Y   M1 A1

    (c) $1600 \div 200 = £8$ M1 A1   *(6 marks)*

4. $4 + 7 = 11$ M1

      $99 \div 11 = 9$ M1

      $4 \times 9 = £36$ B1

      $7 \times 9 = £63$ B1   *(4 marks)*

5. (a) $35 \div 7 = £5$ -   M1 A1

    (b) $4 \times 5 = £20$ M1 A1

    (c) $20 \times 5 = £100$ M1 A1   *(6 marks)*

6. $900 \div 3 = 300$ grams   M1 A1   *(2 marks)*

                                                                   (TOTAL MARKS 30)

Revision Test 7.2 (Academic)   Answers

1. (a)   3 : 5   B2

    (b)   6 : 7   B2

    (c)   3 : 5   B2   *(6 marks)*

2. (a)   1 : 4.5   B2

    (b)   1 : 1.6   B2

    (c)   1 : 8.5   B2   *(6 marks)*

3. (a) $8 \times 240 = 1920$ Pta   M1 A1

    (b) $3.5 \times 240 = 840$ Pta   M1 A1

    (c) $2640 \div 240 = £11$ M1 A1   *(6 marks)*

4. $7 + 6 + 5 = 18$ M1

     $90 \div 18 = 5$ A1

     $7 \times 5 = £35$

     $6 \times 5 = £30$ M1 A1   *(4 marks)*

     $5 \times 5 = £25$

5. (a) $126 \div 9 = £14$ M1 A1

    (b) $7 \times 14 = £98$ M1 A1   *(4 marks)*

6. $\dfrac{150}{60} = 2\dfrac{1}{2}$ hours   M1 A1   *(2 marks)*

7. $\dfrac{2000 \times 100}{20\,000} = 10$ cm   M1 A1   *(2 marks)*

                                                        (TOTAL MARKS 30)

Revision Test 7.3 (Express) Answers

1. (a)   6 : 7   B2

    (b)   2 : 5   B2

    (c)   5 : 7   B2   *(6 marks)*

2. (a)   1 : 0.47   B2

    (b)   1 : 4.4   B2   *(4 marks)*

3. (a) $40 \times 2.4 = 96$ SFr   M1 A1

    (b) $480 \div 2.4 = £200$ M1 A1

    (c) $4.2 \div 2.4 = £1.75$ M1 A1   *(6 marks)*

4. $4 + 6 + 9 = 18$ M1

      $198 \div 18 = 11$ A1

      $\left. \begin{array}{l} 3 \times 11 = 33 \\ 6 \times 11 = 66 \\ 9 \times 11 = 99 \end{array} \right\}$ M1 A1   *(4 marks)*

5. (a) $\dfrac{168}{12} \times 4 = £56$ M1 A1

    (b) $\dfrac{168}{12} \times 9 = £126$ M1 A1   *(4 marks)*

6. $\dfrac{60}{40} = 1\dfrac{1}{2}$ hours   M1 A1

      $\dfrac{60}{50} = 1\dfrac{1}{5}$ hours   M1 A1   *(4 marks)*

7. $\dfrac{4500 \times 100}{25\,000} = \dfrac{450}{25} = 18$ cm   M1 A1   *(2 marks)*

(TOTAL MARKS 30)