

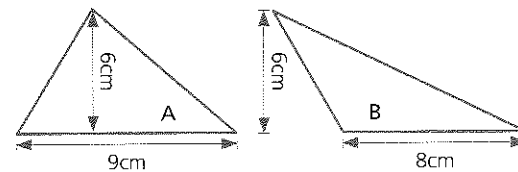
**SECTION 2 | Test 3**

Schofield & Sims

- | A   | Answer                          |
|---|---------------------------------|
| 1 $£0.07 + £7.00 + £0.70 =$                               | <u>£7.77</u>                    |
| 2 $(7 \times 10^3) + (5 \times 10^2) + (3 \times 10^1) =$ | <u>7530</u>                     |
| 3 $p \times 10 = £1.60 =$                                 | <u>16p</u>                      |
| 4 $5 + 7 \times 3 - 2 =$                                  | <u>24</u>                       |
| 5 $1.36 \div 8 =$   | <u>0.17</u>                     |
| 6 $(4 \times 96) + (6 \times 96) =$                       | <u>960</u>                      |
| 7 $360^\circ - (145^\circ + 55^\circ) =$                  | <u>160^\circ</u>                |
| 8 $3\text{ l } 250\text{ ml} - \frac{3}{4}\text{ l} =$    | <u>2.5\text{ l}</u>             |
| 9 $3.593 + 0.407 =$                                       | <u>4.0</u>                      |
| 10 80% of 400 =   | <u>320</u>                      |
| 11 $\frac{2}{3} + \frac{1}{6} =$                          | <u><math>\frac{5}{6}</math></u> |
| 12 Subtract 12 from 7.                                    | <u>-5</u>                       |

- | B   | Answer  |
|---|---|
| 1 What number is one more than 99 999?  | <u>100 000</u>                                |
| 2 By how many seconds is 70s less than $1\frac{1}{4}$ min?  | <u>5s</u>                                     |
| 3 700ml cost £0.91. Find the cost per litre.  | <u>£1.30</u>                                  |
| 4 The length of a rectangle is 15cm and its perimeter is 46cm. Find<br>a the width <u>a 8cm</u><br>b the area. <u>b 120cm<sup>2</sup></u> |   |
| 5 Write 1mm of 2m as a fraction.  | <u><math>\frac{1}{2000}</math></u>            |
| 6 Divide the total of £1.17 and £0.28 by 5.   | <u>£0.29</u>                                  |
| 7 $4 \times y = 4y$ .<br>Find the value of y when $4y = 14$ .   | <u><math>3\frac{1}{2}</math></u>              |
| 8 Approximate<br>a 9493g to the nearest kilogram <u>a 9kg</u><br>b 305426 to the nearest 10000. <u>b 310000</u>                           |   |
| 9 Write as a decimal the sum of $\frac{3}{10}$ and $\frac{84}{100}$ .   | <u>6.14</u>                                   |
| 10 What percentage is 6cm of 2m?  | <u>3%</u>                                     |
| 11 Write the next two numbers in this sequence.<br>$\frac{1}{10}, \frac{1}{5}, \frac{3}{10}, \frac{2}{5}, \frac{1}{2}, \dots$             | <u><math>\frac{3}{5}, \frac{7}{10}</math></u> |
| 12 Write 125ml to 1l as<br>a a fraction in its simplest form <u>a <math>\frac{1}{8}</math></u><br>b a decimal fraction. <u>b 0.125</u>    |   |

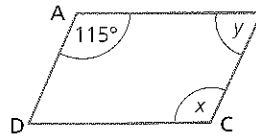
- | C   | Answer   |                    |                    |
|---|--|--------------------|--------------------|
| 1 The price of a 32p packet of sweets is increased by 25%. What is the new price? <u>40p</u>  |  |                    |                    |
| 2 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>Funfair admission: £4.20<br/>children: half price</td></tr></table> Find the total cost for two adults and two children. <u>£12.60</u>   | Funfair admission: £4.20<br>children: half price |                    |                    |
| Funfair admission: £4.20<br>children: half price  |  |                    |                    |
| 3 The length of a garage is 5m. The overall length of a car is 4445mm. By how many millimetres is the garage longer than the car? <u>555mm</u>  |  |                    |                    |
| 4 Claire is employed for 36 hours from Monday to Friday (inclusive). Find in hours and minutes the mean time she works each day. <u>7h 12min</u>  |  |                    |                    |
| 5 From a gift of £10, Ahmed received £3.70. His three friends shared the remainder equally. How much did each friend receive? <u>£2.10</u>  |  |                    |                    |
| 6 A packet of weed-killer will treat 100m <sup>2</sup> of lawn. How many packets are needed to treat a square lawn with 20m sides? <u>4</u>   |  |                    |                    |
| 7 <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>triangle x 96° 42°</td></tr><tr><td>triangle y 60° 60°</td></tr><tr><td>triangle z 90° 57°</td></tr></table> Two of the angles in each of the triangles x, y and z are given. Find the third angle for each triangle. <u>x 42°</u><br><u>y 60°</u><br><u>z 33°</u> | triangle x 96° 42°                               | triangle y 60° 60° | triangle z 90° 57° |
| triangle x 96° 42°  |  |                    |                    |
| triangle y 60° 60°  |  |                    |                    |
| triangle z 90° 57°  |  |                    |                    |
| 8 A map is drawn to a scale of 1cm to 1km. Find the distance in kilometres represented by a line 42mm long. <u>4.2km</u>  |  |                    |                    |
| 9 $F = \{16, 4, \dots, 1, 64, 2, \dots\}$<br>$F =$ the set of factors of 64.<br>Find the missing factors. <u>8 32</u>   |  |                    |                    |
| 10 Which triangle, A or B, has the greater area and by how many cm <sup>2</sup> ? <u>A by 3cm<sup>2</sup></u>   |  |                    |                    |



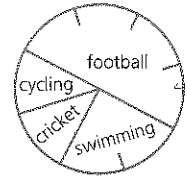
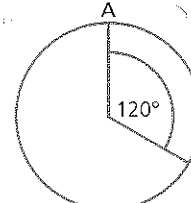

- |   |
|---|
| 11 1l of water has the same volume as 1000cm <sup>3</sup> . What are the volumes in cm <sup>3</sup> of<br>a 200ml <u>a 200cm<sup>3</sup></u><br>b 1.7l? <u>b 1700cm<sup>3</sup></u> |
| 12 A map is drawn to a scale of 1cm to 1km. Express this scale<br>a as a fraction <u>a <math>\frac{1}{100000}</math></u><br>b as a ratio. <u>b 1:100000</u>                         |

**Mental Arithmetic 5 Answers**

- | A  | Answer                             |
|--|------------------------------------|
| 1 $(4 \times 9^2) =$                         | <u>324</u>                         |
| 2 $0.9 - 0.09 =$                             | <u>0.81</u>                        |
| 3 $15p \times 4 = f$                         | <u>£0.60</u>                       |
| 4 $3694 \div 5 = r$                          | <u>738 r 4</u>                     |
| 5 a $0.12 = \%$                              | <u>a 12%</u>                       |
| b $0.125 = \%$                               | <u>b 12.5%</u>                     |
| 6 $2\text{ l} - \text{ ml} = 1.260\text{ l}$ | <u>740ml</u>                       |
| 7 $\frac{1}{8}$ of $360^\circ =$             | <u>45^\circ</u>                    |
| 8 $1\text{ m } 90\text{ mm} = \text{ m}$     | <u>1.090m</u>                      |
| 9 three 50ps + 5ps = £3.00 - £1.25           | <u>5 5ps</u>                       |
| 10 11.33 a.m. to 1.27 p.m. = h min           | <u>1h 54min</u>                    |
| 11 $0.3 \times 0.5 =$                        | <u>0.15</u>                        |
| 12 Find a $\frac{1}{2}$ of $\frac{2}{3}$     | <u>a <math>\frac{1}{3}</math></u>  |
| b $\frac{7}{8}$ of 4.                        | <u>b <math>3\frac{1}{2}</math></u> |

- | B  | Answer                    |
|--|---------------------------|
| 1 How much is left when £1.67 is subtracted from £2.45?  | <u>£0.78</u>              |
| 2 Write as a decimal fraction.<br>a $\frac{1}{4}$ <u>a 0.25</u><br>b $\frac{1}{8}$ <u>b 0.125</u>  |                           |
| 3 Write the volume in cm <sup>3</sup> of a bucket which holds 2.250l.  | <u>2250cm<sup>3</sup></u> |
| 4 Find the difference between 100% of £5.00 and 1% of £5.00.   | <u>£4.95</u>              |
| 5 What number is one thousand less than 800000?  | <u>799000</u>             |
| 6 10 lollies cost £4.50. Find the cost of<br>a one <u>a 45p</u><br>b seven. <u>b £3.15</u>   |                           |
| 7 How many times can 300ml be taken from 6l?   | <u>20</u>                 |
| 8 Which two consecutive numbers have a product of 72?  | <u>8 9</u>                |
| 9 How many days inclusive from 14 December to 17 January?  | <u>35</u>                 |
| 10 Divide £5.00 by 9 to the nearest penny.   | <u>56p</u>                |
| 11  ABCD is a parallelogram. Find in degrees<br>$\angle x$ <u><math>\angle x 115^\circ</math></u><br>and $\angle y$ . <u><math>\angle y 65^\circ</math></u> |                           |
| 12 20% of a sum of money is 85p. What is the whole amount?   | <u>£4.25</u>              |

**SECTION 2 | Test 4**

- | C   | Answer     |      |      |      |            |     |     |     |            |     |     |     |
|---|------------|------|------|------|------------|-----|-----|-----|------------|-----|-----|-----|
| 1 A jug holds 750ml. How many ml does it hold when it is $\frac{2}{3}$ full? <u>500ml</u>   |            |      |      |      |            |     |     |     |            |     |     |     |
| 2 The interior angles of triangles A, B and C are given. Name each of these triangles by its sides.<br><table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>triangle A</td><td>60°</td><td>60°</td><td>60°</td></tr><tr><td>triangle B</td><td>80°</td><td>80°</td><td>20°</td></tr><tr><td>triangle C</td><td>30°</td><td>60°</td><td>90°</td></tr></table> <u>A equilateral</u><br><u>B isosceles</u><br><u>C scalene</u> | triangle A | 60°  | 60°  | 60°  | triangle B | 80° | 80° | 20° | triangle C | 30° | 60° | 90° |
| triangle A  | 60°        | 60°  | 60°  |      |            |     |     |     |            |     |     |     |
| triangle B  | 80°        | 80°  | 20°  |      |            |     |     |     |            |     |     |     |
| triangle C  | 30°        | 60°  | 90°  |      |            |     |     |     |            |     |     |     |
| 3 Car parking costs \$4.00 per hour. How much does it cost to park for 3h 15min? <u>\$13.00</u>   |            |      |      |      |            |     |     |     |            |     |     |     |
| 4 Round each of these numbers to the nearest whole number and then find the approximate total.<br><table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>5.109</td><td>6.5</td><td>4.49</td><td>2.73</td></tr></table> <u>19</u>  | 5.109      | 6.5  | 4.49 | 2.73 |            |     |     |     |            |     |     |     |
| 5.109   | 6.5        | 4.49 | 2.73 |      |            |     |     |     |            |     |     |     |
| 5  The diagram shows how the children voted for their favourite sport. What percentage of the children voted for<br>a swimming <u>a 25%</u><br>b cycling? <u>b 12.5%</u>   |            |      |      |      |            |     |     |     |            |     |     |     |
| 6 If 200 children voted, how many more voted for football than for cricket? <u>75</u>   |            |      |      |      |            |     |     |     |            |     |     |     |
| 7  a What fraction of the circumference of the circle is the arc AB? <u>a <math>\frac{1}{3}</math></u><br>b If the angle at the centre were 240°, what fraction of the circumference would be its arc? <u>b <math>\frac{2}{3}</math></u>   |            |      |      |      |            |     |     |     |            |     |     |     |
| 8 Eight lengths each measuring 2m 40cm are cut from a 20m roll. What length in cm remains? <u>80cm</u>  |            |      |      |      |            |     |     |     |            |     |     |     |
| 9 Find the product of one-half and two-thirds and write the fraction in its simplest form. <u><math>\frac{1}{3}</math></u>  |            |      |      |      |            |     |     |     |            |     |     |     |
| 10 In a freestyle swimming competition, Kai swam 200m in 1min 54.3s. How many seconds less than 2min was his time? <u>5.7s</u>  |            |      |      |      |            |     |     |     |            |     |     |     |
| 11 The diagram shows the distances between four friends' homes. How many metres is it from Sita's to Ellie's? <u>510m</u><br>  |            |      |      |      |            |     |     |     |            |     |     |     |
| 12 The population of a town of 0.5 million fell by 50000. What was the percentage fall in population? <u>10%</u>  |            |      |      |      |            |     |     |     |            |     |     |     |