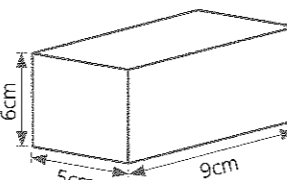Schofield & Sims

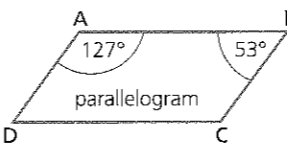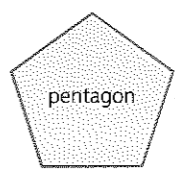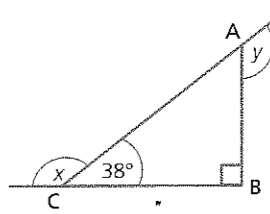## A | Answer

1. Write in digits
   a 0.7 million
   b 1.2 million.

   a 700 000
   b 1 200 000

2. 19p + 27p + 63p = £

   £1.09

3. 12.65km =   m

   12 650m

4. $2\frac{7}{8} + 1\frac{1}{8} + 1\frac{1}{4}$ =

   $5\frac{1}{4}$

5. a 1% of twenty thousand =
   b 100% of four hundred and nine =

   a 200
   b 409

6. $\frac{x}{6}$ = 12. Find the value of x.

   72

7. 1.65m – 95cm =   cm

   70cm

8. $\frac{3}{25} = \frac{}{100}$ =   %

   $\frac{12}{100}$ = 12%

9. 350ml × 9 =   l

   3.15l

10. 4.050kg +   g = 5kg

    950g

11. 35p × 100 =

    £35.00

12. 970 ÷ 40 =   r

    24 r   10

B | Answer

1. How many thousandths are there in five point zero eight?

   5080 thousandths

2. Find the mean average of 2.7, 3.6 and 1.8.

   2.7

3. How many times is 250ml contained in 3.5l?

   14

4. Increase $240 by 5%.

   $252

5. How many hours and minutes from midnight to 1.45 p.m.?

   13h   45min

6. Which of these numbers is a multiple of 4, 6 and 9?

   | 27 | 42 | 54 | 63 | 72 |

   72

7. What is the mass in kilograms of six presents each having a mass of 230g?

   1.38kg

8. 25% of a sum of money is 73p. What is the whole amount?

   £2.92

9. Find the cost of 50g at £2.60 per $\frac{1}{2}$kg.

   26p

10. Write the answer to the nearest whole number. $\frac{705}{8}$ =

    88

11. $\frac{3}{8}$ of a sum of money is 24p. Find $\frac{7}{8}$ of the sum of money.

    56p

12. The perimeter of a square is 1.2m. Find
    a the length of a side in cm
    b the area of the square in cm².

    a   30cm
    b   900cm²

C | Answer

1. Jamil received 12p change from £2 after buying four tins of tomatoes. Find the cost per tin.

   47p

2. The diameter of a circle is 15.6cm. Find its radius in millimetres.

   78mm

3. The mean mass of three suitcases is 25kg. If two of the cases have masses of 20kg and 28kg respectively, find the mass of the other case.

   27kg

4. Which of these fractions or percentages are equal to 0.15?

   | $\frac{1}{4}$ | $\frac{3}{10}$ | 15% | $\frac{3}{20}$ | $\frac{18}{100}$ | 3% |

   $\frac{3}{20}$, 15%

5. Find the smallest sum of money which must be added to £2.45 to make it exactly divisible by 9.

   7p

6. The chart shows the percentages of adults and children who live on a street of 720 people.
   a What percentage are girls?
   b Find the total number of men and women.

   a   40%
   b   180

women	men	boys	girls
13%	12%	35%	?

7. A 12-day holiday started on Friday 26 March. On which day and date did the holiday end?

   Tuesday 6 April

8. A bath when $\frac{5}{8}$ full holds 60 litres. How many litres does it hold when
   a $\frac{1}{8}$ full   b $\frac{3}{4}$ full?

   a   12l
   b   72l

9. The price of a ticket is increased from £1 to £1.18. What is the percentage increase?

   18%

10. The radius of the inner circle is 56mm and the shaded ring is 16mm wide. Find in centimetres the diameter of the outer circle.

    14.4cm

11. The dimensions of a triangle are base 15cm, height 12cm. Find the area of the triangle.

    90cm²

12. a How many cm cubes fit exactly into the bottom of the box?
    b How many of these layers are required to fill the box?

    a 45
    b 6

Mental Arithmetic 5 Answers

A | Answer

1. 5 × 10³ =

   5000

2. 2.805l =   ml

   2805ml

3. £0.07 × 50 = £

   £3.50

4. 44mm + 28mm + 32mm =   cm

   10.4cm

5. $\frac{7}{8}$ of 640 =

   560

6. $1\frac{3}{4}$kg –   g = 1.2kg

   550g

7. (0.25 × 4) ÷ 100 =

   0.01

8. 5% of 3000 =

   150

9. a $\frac{6}{25} = \frac{24}{100}$ =   %
   b $\frac{9}{20} = \frac{}{100}$ =   %

   a $\frac{24}{100}$ = 24%
   b $\frac{45}{100}$ = 45%

10. 0.46 +   = 0.505

    0.045

11. 3m 40cm × 7 =   m

    23.8m

12. £34 ÷ 8 =

    £4.25

B | Answer

1. How many fifties are there in one hundred thousand?

   2000

2. 1 tonne = 1000kg. Write in tonnes
   a 2050kg
   b 800kg.

   a   2.05 tonnes
   b   0.8 tonnes

3. Write 59-sixths as
   a an improper fraction
   b a mixed number.

   a $\frac{59}{6}$
   b $9\frac{5}{6}$

4. Find the missing numbers in the sequence.
   3.65, 3.8, 3.95,   ,

   4.1   4.25

5. Find in degrees the difference between the temperatures 7°C and –8°C.

   15°

6. 100 pencils cost £7.00. Find the cost of
   a 1 pencil   b 30 pencils.

   a   7p
   b £2.10

7.

   | | | Find |

   A   127°   B   53°
   parallelogram
   D   C

   ∠ ADC   53°
   ∠ BCD.   127°

8. What percentage is
   a £7 of £20
   b 28kg of 40kg?

   a   35%
   b   70%

9. How many days inclusive are there from 27 May to 9 June?

   14

10. 30% of a sum of money is 27p.
    a Find 10% of the money.
    b Find 100% of the money.

    a   9p
    b   90p

11. Divide £2.00 by 7. Give the answer to the nearest penny.

    29p

12. Which year is represented by MMXIX?

    2019

C | Answer

1. The population of a city increased from $\frac{3}{4}$ million to 1.1 million. Write in digits the number by which the population increased.

   350 000

2. A box of doughnuts weighs 400g.
   a How many boxes can be made from 3.5kg?
   b How many grams are left?

   a 8
   b   300g

3. In one week Mark drove 503.6km. Find to the nearest kilometre his mean average daily journey.

   72km

4. Which of these numbers do not change in value if the zeros are omitted?

   | 0.740 | 3.016 | 0570 | 0.364 |

   0.740   0.364

5. The perimeter of a regular pentagon is 36cm. Find in millimetres
   a the length of one side
   b the length of one side of a regular octagon of the same perimeter.

   pentagon

   a   72mm
   b   45mm

6. In a test, Luca scored 87% of a possible mark of 200. How many marks did he lose?

   26

7. Nadeen's date of birth is 20/04/14. She is 1 year 9 months younger than Emma. What is Emma's date of birth?

   20/07/12

8. ABC is a right-angled triangle. Find the exterior angles marked x and y.

   A   y
   x   38°   B
   C

   ∠ x =   142°
   ∠ y =   128°

9. 1l of water has a mass of 1kg. If a jar contains 5650ml of water, find the mass of the water to the nearest $\frac{1}{2}$kg.

   5.5kg

10. William's wage was increased from £120 to £132 per week. Find the increase
    a as a fraction in its simplest form
    b as a percentage of the original wage.

    a $\frac{1}{10}$
    b   10%

11. The mass of an empty box is 870g. This is $\frac{3}{10}$ of its total mass when filled with fruit. Find its total mass in kilograms.

    2.9kg

12. A roll of carpet is 50cm wide. Find the length required to cover a surface which measures 8.5m².

    17m