Schofield & Sims

A | Answer

1. Write in digits one hundred and four thousand. — 104 000
2. £1.11 + 8p + 9p + 24p = — £1.52
3. 0.35 = ⬚ thousandths — 350 thousandths
4. 2.8l − 630ml = ⬚ ml — 2l 170ml
5. 350g × 5 = ⬚ kg — 1.75kg
6. $\frac{57}{100}$ of £500 = — £285
7. 7m 28cm ÷ 8 = ⬚ cm — 91cm
8. 297 + 103 = 40 × ⬚ — 10
9. 1 − ($\frac{3}{10}$ + $\frac{2}{5}$) = — $\frac{3}{10}$
10. 8 × 7 = ⬚ × 0.1 — 560
11. $\frac{£14.42}{7}$ = — £2.06
12. a $\frac{1}{4}$ = 0.25 = ⬚ % — a 25%
    b $\frac{3}{4}$ = 0.75 = ⬚ % — b 75%

B | Answer

1. Write as decimal fractions. a $\frac{3}{20}$ — a 0.15
   b $\frac{8}{25}$ — b 0.32
2. What is the difference in grams between $1\frac{3}{4}$kg and 950g? — 800g
3. What length when divided by 6 is equal to 2m 50cm? — 15m
4. The three angles of a triangle each measure 60°. Describe the triangle according to
   a its angles — a acute-angled
   b its sides. — b equilateral
5. Find the value of
   a 50% of 650 — a 325
   b 25% of £0.72. — b 18p
6. How many times is 200ml contained in 2.8l? — 14
7. Approximate to the nearest centimetre.
   a 20.3cm — a 20cm
   b 79mm — b 8cm
8. Write 2017 using Roman numerals. — MMXVII
9. Find the length in metres which is equal to the digits underlined. 6.5_35_km — 35m
10. At 75p per $\frac{1}{2}$kg find the cost of
    a 100g — a 15p
    b 300g. — b 45p
11. Find in centimetres the perimeter of a rectangle which is 65mm long and 30mm wide. — 19cm
12. a 0.1 = ⬚ % — a 10%
    b 0.4 = ⬚ % — b 40%

C | Answer

1. 18% of the people at a cinema were men, 39% were women and the rest were children. What percentage were children? — 43%
2. Katie went on holiday on 29 July and returned on 7 August. For how many days was she on holiday? — 10
3. Josh saved $\frac{1}{4}$ of his pocket money and spent $\frac{1}{4}$ of the remainder. What fraction did he spend? — $\frac{3}{8}$
4. The population of a small town was ten thousand. 50% of the people were under the age of 25. How many was that? — 5000
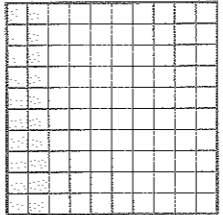5. What is the length in centimetres of the longest straight line that can be drawn inside this circle? — 10.8cm

6. 50% of a sum of money was £7.00. Find the whole sum of money. — £14
7. How many packets each containing 0.2kg can be made from 35kg? — 175
8. A milkshake contains 7 parts of milk and 1 part of syrup. How many millilitres of each are required to make 2l? — 1750ml 250ml
9. Kai's walking pace measures 60cm. How many metres has he walked after taking 50 paces? — 30m
10. The mass of 120kg of dry sand is increased when wet by 10%. Find its mass when wet. — 132kg
11. A scooter costing £25 is reduced by $\frac{1}{20}$. Find
    a the price reduction — a £1.25
    b the new price. — b £23.75
12. Find the area of
    a the front — a 72cm²
    b the end — b 31.5cm²
    c the bottom of the box. — c 112cm²
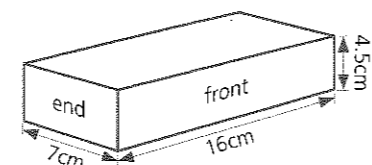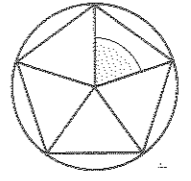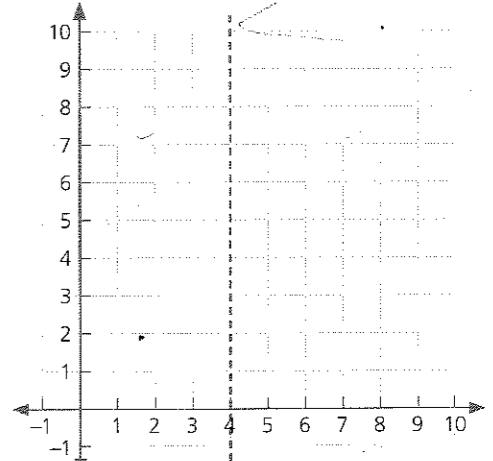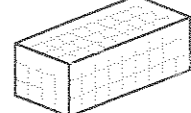
Mental Arithmetic 4 Answers

A | Answer

1. 6009 + ⬚ = 8000 — 1991
2. £3.75 + £3.75 + £3.75 + £3.75 = — £15.00
3. $\frac{7}{20}$ of £2.00 = ⬚ p — 70p
4. $16\frac{2}{3}$ = $\frac{⬚}{3}$ — $\frac{50}{3}$
5. 19min + ⬚ h ⬚ min = 3h — 2h 41min
6. $\frac{11}{25}$ = $\frac{⬚}{100}$ = ⬚ % — $\frac{44}{100}$ = 44%
7. £2.00 − (78p + 30p) = ⬚ p — 92p
8. $\frac{3}{10}$ of 1m 80cm = ⬚ cm — 54cm
9. 0.05 × 8 = — 0.4
10. $\frac{2kg\,400g}{5}$ = ⬚ g — 480g
11. a 0.7 = ⬚ % — a 70%
    b 0.9 = ⬚ % — b 90%
12. 0.09 × 12 = — 1.08

B | Answer

1. Write as a fraction, in its lowest terms, and then as a percentage, the part of the square which is
   a shaded — a $\frac{1}{5}$ 20%
   b unshaded. — b $\frac{4}{5}$ 80%
2. How many right angles are there in 270°? — 3
3. By what length is 50.4km longer than $47\frac{1}{2}$km? — 2.9km
4. Increase £3.70 by 10%. — £4.07
5. How many millilitres must be added to 3050ml to make $3\frac{1}{4}$l? — 200ml
6. $\frac{1}{4}$ of a sum of money is 79p. What is 50% of the money? — £1.58
7. Round 3.595 to the nearest tenth. — 3.6
8. Write as a fraction and simplify.
   a 20% — a $\frac{1}{5}$
   b 2% — b $\frac{1}{50}$
9. Approximate to the nearest $\frac{1}{2}$kg.
   a 7.65kg — a $7\frac{1}{2}$kg
   b 3850g — b 4kg
10. Find the product of 0.2 and 0.3. — 0.06
11. a Write 20% as a decimal fraction. — a 0.2
    b What is 20% of one thousand? — b 200
12. Use the formula A = lb to find the area of a rectangle when l = 16.5 cm and b = 9 cm. — 148.5cm²

C | Answer

1. Find the profit on a scarf which was bought for £8.35 and sold for £10. — £1.65
2. Two angles of a triangle each measure 78°.
   a Name the triangle. — a isosceles
   b Find the third angle. — b 24°
3. The line has been drawn to a scale 1mm to 10m. What distance in metres does it represent? — 780m

 7.8cm

4. 40% of a sum of money is £36. Find
   a 10% of the sum of money — a £9
   b the whole sum of money. — b £90
5. a Name the regular shape drawn in the circle. — a pentagon
   b What is the size of the angle shaded at the centre? — b 72°
6. A bus runs every 35min starting at 07:40. At what time does the third bus leave? — 08:50
7. How many chocolates at three for 20p can be bought for £3.80? — 57
8. Write the coordinates of the point (2, 5) when it is reflected in the line x = 4. — (6 , 5)

9. Which year is represented in Roman numerals as MCMLXXXIV? — 1984
10. 0.5kg of mushrooms cost £1.20. What is the cost of a 100g — a £0.24
    b 0.9kg? — b £2.16
11. This shape is built from centimetre cubes. Find its dimensions.

    a length — a 9cm
    b width — b 4cm
    c height — c 3cm
12. How many centimetre cubes are used to build the block? — 108