Schofield & Sims
Mental Arithmetic 4 Answers

Test 9

A — Answer

1. $5.305 = 5 + \frac{\square}{1000}$ $\frac{305}{1000}$
2. 10% of sixteen thousand =   1600
3. 4.375kg =   g   4375g
4. £2 − (27p + 65p) = £   £1.08
5. 2l 450ml − 0.5l =   ml   1950ml
6. 0.4 +   = 0.476   0.076
7. £1.76 × 5 =   £8.80
8. 0.75km =   m + 325m   425m
9. $\frac{x}{100} = 13.07$ Find x. $\frac{1307}{100}$
10. 38min + 2h + 47min =   h   min   3h 25min
11. a 10% of £20.40 =   a £2.04
    b $2\frac{1}{2}$% of £20.40 =   b £0.51
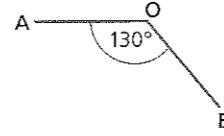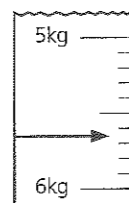12. $\frac{1}{6}$ of 45cm =   mm   75mm

B — Answer

1. Which of these numbers are factors of 75?
   | 5 | 6 | 3 | 7 | 9 |
      3   5
2. Find the mean of 3, 1.4, 2 and 2.6.   2.25
3. Write a $\frac{47}{8}$ as a mixed number   a $5\frac{7}{8}$
   b $5\frac{5}{6}$ as an improper fraction.   b $\frac{35}{6}$
4. What is the cost of 400g at £1.50 per $\frac{1}{2}$kg?   £1.20
5. By how many is 450 × 1000 less than $\frac{1}{2}$ million?   50 000
6. By how many degrees does the temperature fall from 8°C to −5°C?   13°C
7. 25% of Max's money is £35. Find the whole amount.   £140
8. Approximate to the nearest whole number.
   a 79.63   a 80
   b 12.475   b 12
9. By how many millimetres is 95.4cm less than 1m?   46mm
10. Find the least number of pennies which must be added to 92p to make the amount exactly divisible by 6.   4
11. What percentage of 2l is
    a 400ml?   a 20%
    b 100ml?   b 5%
12. Find the volume of the box in cm³.   240cm³ (8cm, 6cm, 5cm)
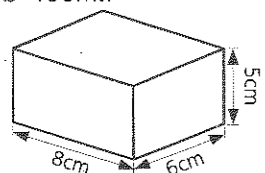
C — Answer

1. By how many thousandths is 1.057 less than 2?   943 thousandths
2. By how many degrees is the reflex angle at O greater than the obtuse angle at O? (130°)   100°
3. Ellie spends $\frac{1}{2}$ of her money on bus fares and $\frac{5}{12}$ on sweets. What fraction of her money is left? $\frac{1}{12}$
4. A cyclist travelled at 24 km/h for $\frac{1}{4}$ hour. How far did she travel?   6km
5. Read as accurately as possible the mass shown by the pointer. Write the answer in grams. (5kg, 6kg)   5650g
6. The population of Town A is a quarter of a million. The population of Town B is fifty thousand less than Town A. What is the population of Town B?   200 000
7. How much change is there out of £15 after spending £9.50 and £3.20?   £2.30
8. Write these decimals in ascending order.
   | 5.03 | 0.35 | 0.5 | 3.05 | 3.5 |
      0.35   0.5   3.05   3.5   5.03
9. A bus runs at intervals of 25 min. What are the times of the next two buses after 08:15?   08:40   09:05
10. Buy today for £60 or pay 10% weekly for 12 weeks. By how much is it cheaper to pay today?   £12
11. A rectangular path is 9m long and 80cm wide. Find its area in m².   7.2m²
12. Ravi is given £85 as birthday gifts. He spends 30% and saves the remainder.
    a What percentage does he save?   a 70%
    b How much money does he spend?   b £25.50

Test 10
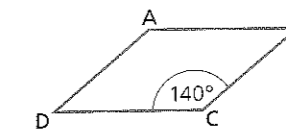
A — Answer
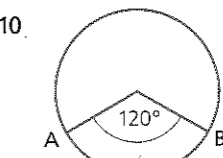
1. Write in digits six hundred and two thousand five hundred and eight.   602 508
2. £0.27 × 40 =   £10.80
3. $\frac{2}{3}$ of 960 =   640
4. a 1% of £17 =   p   a 17p
   b 7% of £17 = £   b £1.19
5. 10.06 =   thousandths   10 060 thousandths
6. £2.30 = three 50ps + two 20ps +   10ps   4 10ps
7. $3\frac{3}{4} × 4 =$ 15
8. 180° − (72° + 36°) =   72°
9. 300g + 450g + 350g =   kg   1.1kg
10. 2h 15min − 50min =   h   min   1h 25min
11. 27cm × 7 =   m   cm   1m 89cm
12. $\frac{£16.56}{8} =$ £2.07

B — Answer

1. By how many is 0.3 million less than $\frac{1}{2}$ million?   200 000
2. What length in metres is 6 times 7m 30cm?   43.8m
3. How many times is $2\frac{1}{2}$ contained in 50?   20
4. Find the total of 17p, 53p, 24p and 7p. Write the answer in £s.   £1.01
5. Write the 24-hour clock time which is 7h before 4.35 a.m.   21:35
6. What fraction in its simplest form is equal to
   a 8%   a $\frac{2}{25}$
   b 35%?   b $\frac{7}{20}$
7. By what quantity is 920ml less than 1.2l?   280ml
8. Increase £30.50 by 10%.   £33.55
9. If the distance from A to D is 14km, find the distance from B to C.   7.05km
   (A 4.7km B   C 2.25km D)
10. Find the cost of 0.3m at £4.80 per metre.   £1.44
11. The perimeter of a rectangle is 65cm. Its length is 24cm. Find its width.   8.5cm
12. 10 doughnuts cost £2.09. Find the cost of one to the nearest penny.   21p

C — Answer

1. How many envelopes costing 3p each can be bought for £2.40?   80
2. ABCD is a parallelogram. Find in degrees (140°)
   a ∠ BAD   a 140°
   b ∠ ABC.   b 40°
3. Share £5 between Henry and Amy so that Henry has 6p each time Amy has 4p. How much does each have?
   Henry   £3
   Amy   £2
4. A man walked steadily at 4km/h from 11.00 a.m. to 2.30 p.m. How far did he walk?   14km
5. From the largest of these decimal fractions take the smallest.
   | 0.33 | 0.3 | 0.03 | 0.333 |
      0.303
6. 1cm³ or 1ml of water has a mass of 1g. A jar holds $3\frac{1}{2}$l of water. Find
   a the volume of water in cm³   a 3500cm³
   b the mass of the water in kg.   b 3.5kg
7. How much is saved by buying 15kg at 16p per kilogram, instead of the same mass at 9p per $\frac{1}{2}$kg?   30p
8.
Date of birth		Find the age on 1 September 2010 in years and months of
Riaz	1.3.96	
Sophie	1.10.94	

   a Riaz   a 14yr 6mth
   b Sophie.   b 15yr 11mth
9. The area of a hall is 60m². Its length is 8m. Find
   a its width   a 7.5m
   b its perimeter.   b 31m
10. (circle, 120°, A B)
    a What fraction of the circumference of the circle is the arc AB?   a $\frac{1}{3}$
    b If the circumference measures 188.4cm, find in millimetres the length of the arc.   b 628mm
11. Cheese costs £2.60 per $\frac{1}{2}$kg. Find the mass in kilograms and grams of cheese which costs £7.80.   1kg 500g
12. Box A measures 8cm long, 9cm wide, 4cm high. Box B measures 10cm long, $5\frac{1}{2}$cm wide, 6cm high. Find the difference in their volumes.   42cm³