

SECTION 1 | Test 4

Schofield & Sims

- | A | Answer |
|----|-------------------------------------------------------------------------------------------------------|
| 1 | $154 \div 7 =$ 22 |
| 2 | $(11 \times 9) + (0 \times 9) =$ 99 |
| 3 | Write in words the number 60060.
..... sixty thousand and sixty |
| 4 | Write the fraction $\frac{3}{20}$ as a percentage. 15% |
| 5 | Express 20% of 0.25 as a decimal. 0.05 |
| 6 | $4.5 \div 6 =$ 0.75 |
| 7 | $10 - (6.3 \div 10) =$ 9.37 |
| 8 | Approximate 0.044 to the nearest hundredth. 0.04 |
| 9 | a Calculate exactly, then
b approximate to 1 decimal place.
2.1×3.2
a 6.72
b 6.7 |
| 10 | If $s = 6$ and $t = 5$,
find the value of $3t - s$ 9 |
| 11 | $\frac{4}{15} \times \frac{10}{12} =$ $\frac{2}{9}$ |
| 12 | $\sqrt{144} =$ 12 |

- | B | Answer |
|----|----------------------------------------------------------------------------------------------------------------------------------------|
| 1 | $\pounds 13.26 - 115p =$ $\pounds 12.11$ |
| 2 | What is 9% of $\pounds 50$? $\pounds 4.50$ |
| 3 | Change 2.5m to centimetres. 250cm |
| 4 | $2650m + 8145m =$ 10km 795m
..... 10,795km |
| 5 | $3\frac{1}{2}$ centuries = 350 years |
| 6 | Katy cycles $4\frac{1}{2}$ miles in 20min.
Find her mean (average) speed
in miles per hour. $13\frac{1}{2}$ mph |
| 7 | Find the circumference of a coin
of diameter 7cm to the nearest
whole centimetre.
$\pi = 3.14$ 22cm |
| 8 | The smallest angle of a right-angled
triangle is 30° . What sizes are
the other angles? 60° 90° |
| 9 | Which letters of the word VAPOUR
have a vertical axis of symmetry? V A O U |
| 10 | Approximate 606g to the
nearest kilogram. 1kg |

C **Answer**

The table below is part of a spreadsheet. The computer can perform calculations on the data held in each cell by applying a mathematical formula.

For example, the value in cell D2 is found by using the formula $B2 \times C2$ where * means multiply (i.e. $\pounds 6.50 = \pounds 0.65 \times 10$).

The formula used to calculate the total cost of $\pounds 47.02$ is $SUM(D2:D9)$. That is, $\pounds 47.02$ is found by adding together all the values in cells D2 to D9.

	A	B	C	D
1	Cakes ordered	Price each	Quantity	Cost
2	Doughnut	$\pounds 0.65$	10	$\pounds 6.50$
3	Cupcake	$\pounds 1.99$	6	$\pounds 11.94$
4	Fruit cake	$\pounds 2.99$	4	$\pounds 11.96$
5	Gingerbread man	$\pounds 0.99$	5	$\pounds 4.95$
6	Belgian waffle	$\pounds 1.49$	2	$\pounds 2.98$
7	Bakewell tart	$\pounds 2.49$	1	$\pounds 2.49$
8	Macaroon	$\pounds 0.45$	4	$\pounds 1.80$
9	Chocolate éclair	$\pounds 0.55$	8	$\pounds 4.40$
10	Total			$\pounds 47.02$

- Write down the contents of cell A5. gingerbread man
- Write down the contents of cell B9. $\pounds 0.55$
- Write down the contents of cell D4. $\pounds 11.96$
- Which cell contains the word 'Macaroon'? A8
- Which cell contains the value 8? C9
- Which cell contains the value $\pounds 2.98$? D6
- What is the result of multiplying the contents of cell B8 by the contents of cell C8? $\pounds 1.80$
- Which cell of the table above contains the answer to Question 7? D8
- What is the result of applying the formula $B5 \times C5$? $\pounds 4.95$
- What is the result of applying the formula $SUM(C2:C9)$? 40
- Into which empty cell would you write the answer to Question 10? C10
- Write down in words what the result of the formula in Question 10 tells you.
..... total quantity of goods ordered is 40

Mental Arithmetic 6 Answers

- | A | Answer |
|----|----------------------------------------------------------------------------------------------------------|
| 1 | $1001 \times 12 =$ 12012 |
| 2 | $154 \div 25 =$ 6 r 4 |
| 3 | Add together two thousand and eight and eight thousand and two.
Answer in digits. 10010 |
| 4 | Express 2% as a decimal. 0.02 |
| 5 | Write $\frac{3}{5}$ of 7.5 as a decimal. 4.5 |
| 6 | $21.3 - 7.8 + 8.7 =$ 22.2 |
| 7 | $9.9 - (9.9 \div 9.9) =$ 8.9 |
| 8 | Approximate 14.139 to two decimal places. 14.14 |
| 9 | a Calculate exactly, then
b approximate to 1 decimal place.
0.05×3.22
a 0.161
b 0.2 |
| 10 | $\frac{4}{8} \div 3 =$ $\frac{1}{6}$ |
| 11 | $a + 5 = 29$ so $a =$ 24 |
| 12 | $2^3 =$ 8 |

- | B | Answer |
|----|------------------------------------------------------------------------------------------------------------------------|
| 1 | $81p - \pounds 1.06 + 52p =$ (77) 27p |
| 2 | Increase $\pounds 25$ by 50%. $\pounds 37.50$ |
| 3 | Change 1.1kg to grams. 1100g |
| 4 | $855g + 2.2kg =$ 3kg 55g
..... 3.055kg |
| 5 | 4h 20min = 260min |
| 6 | A car travels at a speed of 45km/h for 1h and then at 60km/h for 2h.
Find the average speed of the car. 55km/h |
| 7 | A 7.5cm line is enlarged by the scale factor 3. What is the length of the new line? 22.5cm |
| 8 | The largest angle of an isosceles triangle is 100° . How big is each of the other angles? 40° |
| 9 | Which letters of the word GROCER have a horizontal axis of symmetry? O C E |
| 10 | 16oz equal 1lb (pound). Approximate 50oz to the nearest pound. 3lb |

SECTION 1 | Test 5

Month	Rainfall in millimetres	
	Glasgow	London
January	170	45
February	141	39
March	127	44
April	88	36
May	86	43
June	79	49
July	99	63
August	135	58
September	119	48
October	133	65
November	161	54
December	186	56
Annual total	1524	600

The table compares monthly rainfall figures for Glasgow and London.

- What is the total annual rainfall for Glasgow? 1524mm
- What is the mean (average) monthly rainfall for Glasgow? 127mm
- In which month was the rainfall in Glasgow closest to the mean? March
- What fraction of Glasgow's annual rainfall fell in March? $\frac{1}{12}$
- What is the range of rainfall in Glasgow? (i.e. the difference between the wettest month and the driest month) 107mm
- By how much does the rainfall in Glasgow's driest month exceed that of London's wettest month? 14mm
- What is the total annual rainfall for London? 600mm
- What is the mean (average) monthly rainfall of London? 50mm
- In which month was the rainfall in London closest to the mean? June
- What percentage of London's annual rainfall fell in the driest month? 6%
- What is the range of rainfall in London? 29mm
- Which city, Glasgow or London, has the greatest range of rainfall? Glasgow