Schofield & Sims
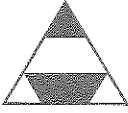
A — Answer

1. $(0.2)^3 =$ — 0.008
2. $\frac{54 \times 56}{63} =$ — 48
3. Write $3^5 \div 3^3$ as a power of three. — 3^2
4. Insert the symbol <, > or = to make a correct statement. $1\frac{1}{8}$ < 1.8 = $1\frac{4}{5}$
5. $3\frac{1}{3} \times 10 =$ — $33\frac{1}{3}$
6. $4.8 \div 0.6 =$ — 8
7. $(0.2)^2 + (0.3)^2 + (0.2 + 0.3)^2 =$ — 0.38
8. 0.0387 becomes 0.00390 when rounded to three decimal places. True or false? — false
9. $6 < \frac{278}{39} < 8$ True or false? — true
10. If $x = 3$, $y = 5$, $z = 8$, find the value of $\frac{z}{1+xy}$. — 0.5
11. $50 = \frac{1}{2}a \times 5^2$ so $a =$ — 4
12. Write the next two terms of the sequence.
    $\frac{1}{2}, \frac{2}{3}, \frac{3}{4}, \frac{4}{5},$ — $\frac{5}{6}$ $\frac{6}{7}$

B — Answer

1. Which is the better buy
   a 40 for 50p or b 200 for £2.40? — b
2. A £395 computer is reduced by 8%. What is the amount saved? — £31.60
3. 5 miles is approximately — 8km
4. $13.53kg \div 6 =$ — 2255g
5. Noah works five shifts each of 7h 50min. What is Noah's total working time? — 39h 10min
6. Find the area of a circle whose radius is 2cm, to the nearest whole number. — 13cm²
   | $A = \pi r^2$ | $\pi = 3.14$ |
7. Find my speed if travelling 0.25 miles in $\frac{1}{2}$min. — 30mph
8. A square with 15mm sides was enlarged by the scale factor x. The area of the new square is 144cm². What is the value of x? — 8
9. What is
   a the number of axes of symmetry and — a 1
   b the order of rotational symmetry about the centre of the shape shown? — b 1
10. If 720 equal lengths of electrical cable are cut from a reel of total length 500yd, what is the length of each cut piece of cable to the nearest foot? — 2ft

C — Answer

Javad has fourteen cards.
On six of them is a single-digit number.

| 3 | 6 | 5 | 1 | 0 | 2 |

On each of the other eight is a mathematical symbol.

| + | − | × | ÷ | = | . | < | > |

Fill in the blanks to show how Javad arranged his cards to answer the following questions. Not every card needs to be used but no card can be used twice in any one question.

1. 3 × 2 = 6
2. 5 + 3 − 2 = 6
3. 3 0 ÷ 6 = 5
4. 6 0 ÷ 5 = 1 2
5. 3 0 − 6 < 2 5
6. 3 6 ÷ 1 2 > 0
7. 3 ÷ 2 = 1 . 5
8. 5 = 6 ÷ 1 . 2
9. 2 × 3 ÷ 1 + 0 = 6
10. 2 6 = 3 0 − 5 + 1
11. 1 ÷ 0 . 5 = 2
12. 3 ÷ 0 . 2 = 1 5

Name of pupil _____

Diagnostic Chart for Section 3
Indicate where pupil has difficulty

		1	2	3	4	5	6	7	8	9	10	11	12
Test 1	Part A												
	Part B												
	Part C												
Test 2	Part A												
	Part B												
	Part C												
Test 3	Part A												
	Part B												
	Part C												
Test 4	Part A												
	Part B												
	Part C												
Test 5	Part A												
	Part B												
	Part C												
Test 6	Part A												
	Part B												
	Part C												
Test 7	Part A												
	Part B												
	Part C												
Test 8	Part A												
	Part B												
	Part C												
Test 9	Part A												
	Part B												
	Part C												
Test 10	Part A												
	Part B												
	Part C												
Test 11	Part A												
	Part B												
	Part C												
Test 12	Part A												
	Part B												
	Part C												