Q1.

Circle the **two** numbers which add up to **1**

0.1   0.65   0.99   0.45   0.35

Q2.

Write the **largest** whole number to make this statement true.
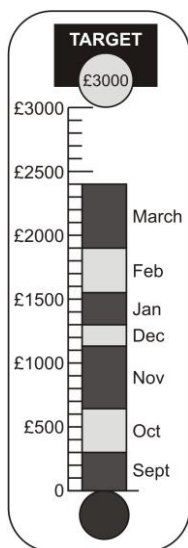
50   +   ☐   <   73

Q3.

A school collects money for charity.

This chart shows how much has been collected.

The target is **£3000**

Estimate how much **more** money the school needs to reach the target.

Anil says,

The chart shows that we will reach the target in two months.

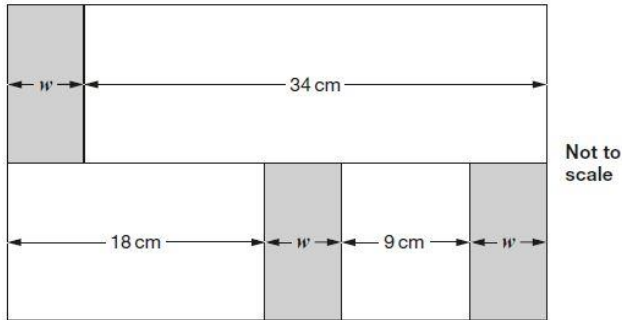Use the chart to explain why Anil may be wrong.

Q4.

Write the missing numbers in the sequence

☐   6,742,000   6,842,010   6,942,020   ☐

Q5.

In this diagram, the shaded rectangles are all of equal width (*w*).

Calculate the width (*w*) of one shaded rectangle.

2 marks

Q6.

This number sequence follows the rule

'subtract 10, then divide by 10'

Write the **two numbers** missing from the sequence.

[   ]   120   11   0.1   [   ]

2 mark

Q7.

A shop sells notebooks and pens.

Hassan bought **a notebook** and **a pen**.

He paid **£1.10**

Kate bought **a notebook** and **2 pens**.

She paid **£1.45**

Calculate the cost of **a notebook**.

2 marks

Q8.

A **drink** and a **box of popcorn** together cost **90p**.
2 drinks and a **box of popcorn** together costs **£1.45**

What does a **box of popcorn** cost?

1 mark

Explain how you got your answer.

Q9.

```
  9 7 □ 4 2
− 1 □ 3 6 □
─────────────
  8 5 4 7 7
```

2 marks

Q10.

Layla wants to estimate the answer to this calculation.

$$3\frac{9}{10} - 2\frac{1}{8} + 1\frac{4}{5}$$

Tick the calculation below that is the best estimate.

Tick one

3 − 2 + 2 ☐

4 − 2 + 1 ☐

4 − 2 + 2 ☐

3 − 2 + 1 ☐

1 mark

Mark schemes

Q1.

0.1   (0.65)   0.99   0.45   (0.35)

[1]

Q2.

22

[1]

Q3.

(a)   Answer in the range of £600 to £650, inclusive.

          1

(b)   Explanation which indicates that the amounts raised each
      month can vary **AND** that
      the money raised may be either insufficient to reach the target in
      2 months or enough to reach the target in 1 month, eg

-    'They could have two months like December'

-    'In April they might get more money than any month before'

                     *Accept appropriate explanations related to the answer
                     given in 19a, even if this is incorrect.*

                     Do not *accept vague or arbitrary reasons, eg:*

                     'They might not get any more money';

                     'People have spent all their money on charity';

                     'It's not enough time'.

          1

[2]

Q4.

6,641,990

          1

7,042,030

          1

[2]

Q5.

Award **TWO** marks for the correct answer of 7

If the answer is incorrect, award **ONE** mark for evidence of an appropriate method, e.g.

-    18 + 9 + 2 widths = 34 + 1 width
     27 + 2 widths = 34 + 1 width
     27 + 1 width = 34
     34 − 27

OR

-    34 − (18 + 9)

                Answer need not be obtained for the award of ***ONE*** *mark.*

                Award ***ONE*** *mark for a method which uses algebraic representation correctly, e.g.*

              -    $34 + w = 18 + w + 9 + w$
                  $34 + w = 27 + w + w$

                              Up to 2m

Q6.

| 1210 | 120 | 11 | 0.1 | −0.99 |

(a)   1210 in left-hand box.

1

(b)   −0.99 in right-hand box.

Do not *accept '0.99–'*

$$\frac{'-9.9'}{10}$$

Do not *accept*

1

[2]

Q7.

Award **TWO** marks for the correct answer of 75p

If the answer is incorrect, award **ONE** mark for evidence of appropriate working, eg

£1.45 – £1.10 = 35p

£1.10 – 35p = wrong answer

OR

£1.10 × 2 = £2.20

£2.20 – £1.45 = wrong answer

Accept for **ONE** *mark 0.75p* **OR** *£75 as evidence of appropriate working.*

Working must be carried through to reach an answer for the award of **ONE** *mark.*

Up to 2 (U1)

[2]

Q8.

(a)   35p

Answer to 17a may be embedded in answer to 17b.
In this case, award one mark for correct answer.

1

(b)   Explanation which includes reference to any appropriate method even if the
      answer is incorrect, eg:

   • I took 90 from 145 and took my answer from 90

   • If a drink and popcorn costs 90p you add to it however much it takes to make 145, which is 55p so you times 55
     by 2 which is 110 and take away 145 and you get 45 (incorrect answer).
     OR
     a trial and improvement approach, eg:

   • I thought they might both cost 45p. I guessed the drink and doubled it to make 90p, then added another 45 but I
     got 10 less than £1.45. So I tried 55 and it worked so the popcorn is 35

Accept appropriate numerical working elsewhere on page as adequate explanation.
If there is no working and no explanation, there is no mark for 17b, even if 17a is
correct.

If answer to 17a is correct, accept appropriate non-numerical answer to 17b, (ie no
reference to actual amounts of money).

1

[2]

Q9.

All three correct

9 7 $\boxed{8}$ 4 2
  1 $\boxed{2}$ 3 6 $\boxed{5}$
_____
  8 5 4 7 7
_____

2

or

Any two correct

1

[2]

Q10.

Third box only ticked correctly, as shown:

3 − 2 + 2   ☐

4 − 2 + 1   ☐

4 − 2 + 2   ✓

3 − 2 + 1   ☐

Accept alternative unambiguous positive indication of the correct answer, e.g. Y.

[1]