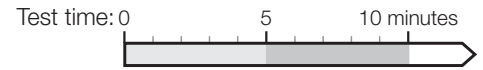


Test A: **Mixed**

Andrew was 2 when Juliet was born and Juliet was 4 when Carol was born. Carol was 3 when Matthew was born and Matthew is now one third the age of Uncle John who is 42. How old are the children now?

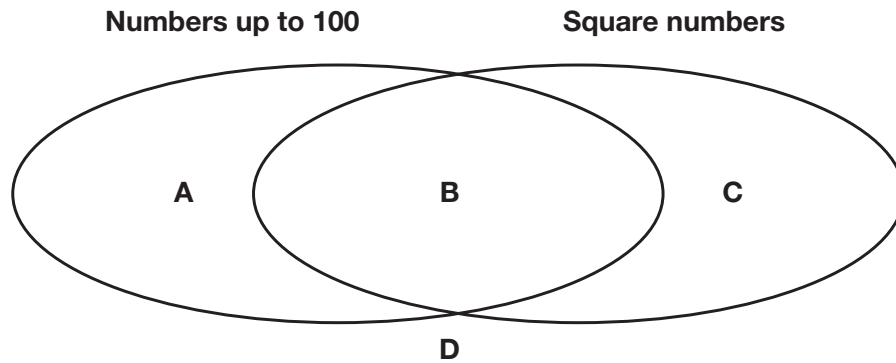
4

- 1 Andrew is _____ years old.
- 2 Juliet is _____ years old.
- 3 Carol is _____ years old.
- 4 Matthew is _____ years old.

Mrs Vassou is throwing a party for 50 people. She decides to make an elderflower drink by diluting elderflower cordial with sparkling water. The cordial needs to be diluted one part cordial to four parts sparkling water. Elderflower cordial costs £3.99 for a $\frac{1}{2}$ -litre bottle. Underline one answer for each question.

- 5 If Mrs Vassou wants everyone to have a 250 ml glass of elderflower drink, how many bottles of elderflower cordial does she need to use?
a 1 **b** 3 **c** 4 **d** 5 **e** 8
- 6 How much will it cost Mrs Vassou to buy sufficient elderflower cordial?
a £31.92 **b** £19.95 **c** £15.96 **d** £11.97 **e** £3.99
- 7 Mrs Vassou serves the elderflower drink in 1.5-litre jugs. How many jugs will she need to hold all of the drink?
a 2 **b** 5 **c** 8 **d** 9 **e** 10

Here is a Venn diagram. Use it to decide where the following numbers should fit. Underline the correct answer.



8 Where does the number 81 fit?

- a A b B c C d D



9 Where does the number 144 fit?

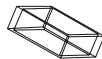
- a A b B c C d D



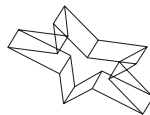
Which shape on the right is a 3D rotation of the shape on the left? Underline the correct answer.



10



a



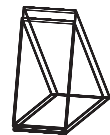
b



c

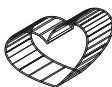
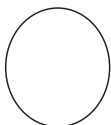


d

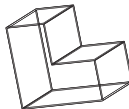


e

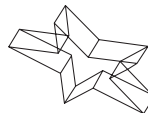
11



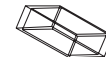
a



b



c



d



e

Answers

Test A: Mixed

1–4 Uncle John is 42 and Matthew is $\frac{1}{3}$ of his age. $42 \div 3 = 14$ so Matthew must be 14. If Carol was 3 when Matthew was born she is 3 years older. $14 + 3 = 17$ so Carol must be 17. If Juliet was 4 when Carol was born then she is 4 years older. $17 + 4 = 21$ so Juliet must be 21. If Andrew was 2 when Juliet was born then he must be 2 years older. $21 + 2 = 23$ so Andrew must be 23.

1 23 **2** 21 **3** 17 **4** 14

5 d $50 \text{ people} \times 250 \text{ ml} = 12.5 \text{ litres}$; $12.5 \text{ litres} \div 5 \text{ parts} = 2.5 \text{ litres}$; $2.5 \text{ litres} \div 0.5\text{-litre bottles} = 5 \text{ bottles}$

6 b $5 \times \text{£}3.99 = \text{£}19.95$

7 d $12.5 \text{ litres} \div 1.5 \text{ litres} = 8.3$ rounded up to 9 jugs

8 b 81 is a square number and is under 100.

9 c 144 is a square number.

10 d

11 e