

- 1 **25** people are surveyed on the street by Aaron. The table below shows the number of TVs owned by the people passing.

Number of TVs	People
0	4
1	12
2	2
3 or more	7

$$\begin{array}{r} 4 \\ 12 \\ + 17 \\ \hline 23 \end{array}$$

$$\begin{array}{r} 25 \\ -23 \\ \hline 2 \end{array}$$

How many people own only two TVs?

- A 3    B 7    C 13    **D 2**    E 23

- 2 A bag of sweets costs £1.10.

$$\begin{array}{l} \pounds 1.10 \times 10 = \pounds 11 \times \\ \pounds 1.10 \times \textcircled{9} = \pounds 9.90 \checkmark \end{array}$$

What is the largest number of bags I can buy with £10?

- A 9**    B 10    C 8    D 11    E 90

- 3 Look at the 5 calculations below.

$$\begin{array}{ccccc} 2^2 - 1 & \textcircled{2^3 - 1} & 2^2 - 1^3 & 2 - 1^3 & 2 - 1 = \textcircled{1} \\ 2 \times 2 - 1 & 2 \times 2 \times 2 - 1 & 2 \times 2 - 1 \times 1 \times 1 & 2 - 1 \times 1 \times 1 = & \\ 4 - 1 = \textcircled{3} & 8 - 1 = \textcircled{7} & 4 - 1 = \textcircled{3} & 2 - 1 = \textcircled{1} & \end{array}$$

Which calculation gives the largest answer?

- A  $2^2 - 1$     **B  $2^3 - 1$**     C  $2^2 - 1^3$     D  $2 - 1^3$     E  $2 - 1$

- 4 Woody measures the length of each of the five lines in a maths lesson. The mean (average) length of the lines is 10cm. Below is the lengths of four of the lines.

$$\begin{array}{r} 8 \\ 12 \\ 6 \\ + 27 \\ \hline 33 \end{array}$$

Line 1	8cm
Line 2	12cm
Line 3	6cm
Line 4	7cm
Line 5	<u>17</u> cm

$$\begin{array}{r} 450 \\ - 33 \\ \hline 17 \end{array}$$

←  $\div 5 = 10$   
 $\times 5$

What is the length of the fifth line?

A 33

B 13

C 10

D 8

**E 17**

For question 5, you have to **write your answer** in the space provided in the question.

- 5 Write a number in the space below that makes the statement true.

$$9 \text{ is } \underline{30} \% \text{ of } 30 = \frac{9}{30} = \frac{3}{10} = 30\%$$

Read the **whole** passage carefully, then answer the questions that follow.

### Eggciting Stuff!

1. John, Aaron, and Lewis met after work to begin the plans for their group science project.
2. Their project was to find a way to protect an egg from breaking as it was dropped from a two-story building. John and Lewis were beavering away with their materials, which included a
3. pile of newspapers, some bubble wrap, and rubber bands. John was tearing newspaper into
4. strips and watching Aaron doodle in a notebook. Finally, he couldn't stay quiet any longer.
5. "Aaron, when are you going to help us?" he asked. "We need to get this project done today."
6. Lewis reached across the table for another rubber band to knit into the rubber mat he was
7. trying to make. "Yeah, Aaron," he said. "Could you put down your notebook of drawings and
8. help us?" Aaron was a good friend, but he didn't seem to give science the same attention
9. that Lewis and John did. His mind always seemed to be off somewhere else—mainly in his
10. drawing book.
11. Aaron looked up at a snail's pace, making John and Lewis think he may not have heard them
12. at all. Then he turned the page toward them. Aaron had sketched a diagram that showed an
13. egg in the centre of a layer of newspaper and bubble wrap. The egg had been wrapped with
14. several rubber bands, which crisscrossed each other to make a thick layer of padding. John
15. and Lewis were impressed.
16. "I was just thinking," Aaron said. "I always get my best ideas when drawing, do you think it'll
17. work?"

For these questions you have to **write your answers**, neatly, in the boxes provided.

- 1** Look at lines 3–8. Why were John and Lewis working quickly at the start of the passage?

Project needed finished that day

- 2** Look at lines 4–11. What two things show that Aaron was not focused on the project at first?

Doodling, didn't hear or respond

- 3 Look at lines 12–16. Find two words that show Aaron responded slowly to John and Lewis.

snail's pace

- 4 Which one part of speech are the following as they appear in the passage?

doodle (line 5), reached (line 7), wrapped (line 14), crisscrossed (line 15)

verb

- 5 Which part of speech is 'diagram' as it appears in the passage? (line 13)

noun