1. The diagram shows a solid 3D object.

How many faces does it have?

- 7
- 8
- 9
- 11

2. Which number sentence is correct when \( ? \) is replaced by 5?

\[
\begin{align*}
15 + \ ? &= 10 \\
\ ? - 6 &= 1 \\
10 - \ ? &= 5 \\
11 + 6 &= \ ?
\end{align*}
\]

3. Steven left for school at 8:45 am. He got to school at 9:06 am.

How long did it take Steven to get to school?

- 15 minutes
- 21 minutes
- 51 minutes
- 61 minutes

4. \( 176.8 + 32.4 = ? \)

- 198.2
- 199.2
- 208.2
- 209.2
- 500.8
5. Alana made some cookie men.
Each cookie man had 2 star lollies and 3 round lollies.
Alana used 48 round lollies altogether.
How many star lollies did Alana use?

16 24 32 48 96

6. Megan tosses a normal coin four times.
It lands heads up each time.
She tosses it a fifth time.
Which of the following is true?
- It is more likely to land heads up than tails up.
- It is certain to land tails up.
- It has an equal chance of landing heads up or tails up.
- It is more likely to land tails up than heads up.

7. Sandy drew a shape.
It has three sides equal in length and only one side that is longer.
Which of these could be Sandy’s shape?
8 Lydia starts with a number.
She doubles it and then subtracts 4 to get an answer of 8.
What number did Lydia start with?

6 8 12 24

9 Lucas put three identical tiles together at their edges.
He drew around the outside to make this new shape.
Which of these could have been the shape of his tiles?

triangles trapeziums pentagons hexagons

10 Which of these designs looks identical after a quarter turn?

11 Jasim is trying to write down all the prime numbers less than 20.
She writes: 2, 3, 5, 7, 11, 13, 19
Which number is missing?

9 15 17 23
12. Dean uses the same rule to change each △ into a □.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>7</td>
<td>19</td>
</tr>
</tbody>
</table>

Which of these rules did Dean use?

- □ = △ × 1 + 2
- □ = △ × 2 + 5
- □ = △ × 3 − 2
- □ = △ × 4 − 5

13. Jane got out of bed at 7:30 am.
She went back to bed 13\(\frac{1}{2}\) hours later.
At what time did she go back to bed?

- 8:30 pm
- 9:00 pm
- 10:30 pm
- 11:00 pm

14. Dave is making a pattern of tiles.
At each stage, tiles are added to edges that don’t already have a tile on them as shown.

Stage 1
1 tile

Stage 2
4 tiles

Stage 3
10 tiles

Stage 4
19 tiles

What is the total number of tiles needed for Stage 5?

- 22
- 28
- 31
- 33
This USB drive can hold 16 gigabytes of data in its memory.

At the moment, 12 gigabytes of memory has been used.
What percentage of the memory has **not** been used?

- 4%
- 25%
- 34%
- 40%
- 75%

A standard six-sided dice is rolled.
Which of the following events has a probability less than 1?

- rolling a number greater than 0
- rolling a number less than or equal to 7
- rolling a number greater than or equal to 1
- rolling a number greater than or equal to 6

Kim has an ink stamp that makes this shape.

Kim makes each of these designs by stamping the shape four times.
Which of Kim’s designs has **only two** lines of symmetry?
To make a syrup, 3 cups of water must be used for every 4 cups of sugar. How many cups of water are needed for 6 cups of sugar?

- 1.5 cups
- 4.5 cups
- 5 cups
- 8 cups

Rosa and Hank both read books with 50 pages. This chart shows the total number of pages they read.

<table>
<thead>
<tr>
<th>Number of pages</th>
<th>Rosa</th>
<th>Hank</th>
</tr>
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<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
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<tr>
<td>50</td>
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</tbody>
</table>

How many **more** pages did Hank read than Rosa on Tuesday night?

Nathan lives in Brisbane. Kareena lives in Mumbai. When it is 10:25 am in Brisbane it is 5:55 am in Mumbai on the same day. Kareena rings Nathan when it is 9:00 am in Mumbai. What time is it in Brisbane?

- 1:00 pm
- 1:30 pm
- 2:00 pm
- 2:30 pm
21
This is a stamp.
It makes a key shape.

Which one of these shapes can the stamp make?

22
Cody, Liam and Molly have 60 stickers in total.
Cody has half as many stickers as Liam.
Molly has three times as many stickers as Cody.

How many stickers does Cody have?

23
There are 600 vehicles in a car park.
One-third of them are trucks. The rest are cars. One-quarter of the cars are white.

How many white cars are in the car park?
24 Which of these is true for the value of $170 \times 0.1$?
- less than 170
- equal to 170
- greater than 170

25 Bindi made 36 muffins. Some of the muffins were apple and some were pear. Both kinds of muffins looked the same.
  Tegan took a muffin. She had a 1 in 9 chance of taking a pear muffin.
  How many apple muffins did Bindi make?

26 Which one of these shapes has diagonals that cross at right-angles?

27 Dale is a beekeeper.
  The mass of 500 millilitres of Dale’s honey is 700 grams.
  How many litres is 3.5 kilograms of Dale’s honey?
Sarah bought two full bags of sand. Both bags had the same amount of sand in them. After she used $\frac{1}{4}$ of one bag of sand, she had a total of 35 kilograms of sand left. How many kilograms of sand were in one full bag?

kilograms

A school office has an ink-jet printer and a laser printer. The ink-jet printer takes 10 seconds to start and then prints 20 pages per minute. The laser printer takes 5 seconds to start and then prints 30 pages per minute.

A teacher prints a document that takes 70 seconds to print on the ink-jet printer. How long would it take to print on the laser printer?

seconds
30 This design is made out of squares and equilateral triangles.

What is the length of the design?

\[
\text{length} = 12 \text{ mm}
\]

31 This triangle was made by cutting a square in half.
The perimeter of the triangle is 34.14 cm.

What is the area of the triangle?

\[
\text{area} = \frac{1}{2} \times 14.14 \times 14.14 = 100 \text{ square centimetres}
\]

STOP – END OF TEST