## Geometry, Patterns, and

 Symmetry| Theme | Geometry, Patterns, and Symmetry |
| :---: | :---: |
| Question 1 | Jack wrote a number pattern: $1,5,9,13, ?, 21,25$. <br> What is the missing value in Jack's number pattern? <br> - 14 <br> - 16 <br> - 17 <br> - 20 |
| Question 2 | Which combination will come in at the $8^{\text {th }}$ place in the following series? <br> A1C, D2F, G3I, J4L... <br> - S8U <br> - U8X <br> - V8W <br> - V8X |
| Question 3 | Which of the following letters have more than two lines of symmetry? <br> - X <br> - H <br> - I <br> - O |


| Question 4 | How many lines of symmetry does this figure have? <br> - 8 <br> - 6 <br> - 4 <br> - 2 |
| :---: | :---: |
| Question 5 | How many rays can be drawn from a given point? <br> - 0 <br> - 1 <br> - 4 <br> - infinite |
| Question 6 | Which solid shape has 6 faces, but only the opposite faces are equal in shape and size? <br> - Cylinder <br> - Cube <br> - Cuboid <br> - Cone |
| Question 7 | Which of these letters of the English alphabet remains the same, after it is reflected through a vertical line? <br> - B <br> - C <br> - P <br> - T |


| Question 8 | The radius of a circle is 12 cm . What is the length of the line segment which divides the circle into two equal halves? <br> - 30 cm <br> - 24 cm <br> - 18 cm <br> - 12 cm |
| :---: | :---: |
| Question 9 | Which of these is the correct way of naming this angle? <br> - $\angle \mathrm{BAC}$ <br> - $\angle \mathrm{CBA}$ <br> - $\angle \mathrm{ABC}$ <br> - None of these |
| Question 10 | How many geometrical pieces does a tangram consist of? <br> - 5 <br> - 6 <br> - 7 <br> - 8 |

## Answers

| Answer 1 | 17 |
| :--- | :--- |
| Answer 2 | V 8 X |
| Answer 3 | O |
| Answer 4 | 4 |
| Answer 5 | infinite |
| Answer 6 | Cuboid |
| Answer 7 | T |
| Answer 8 | 24 cm |
| Answer 9 | $\angle \mathrm{ABC}$ |
| Answer 10 | 7 |

