## Lines and Angles; Triangles; Congruence of

| Question 1 | In the figure, which angles form a pair of alternate interior angles? <br> - $\angle 1, \angle 2$ <br> - $\angle 2, \angle 5$ <br> - $\angle 2, \angle 3$ <br> - none of above |
| :---: | :---: |
| Question 2 | In quadrilateral $\mathrm{ABCD}, \mathrm{AD}=\mathrm{BC}$ and $\angle \mathrm{DAB}=\angle \mathrm{CBA}$. If $\triangle \mathrm{ABD} \cong \triangle \mathrm{BAC}$, what is the relation between $\angle \mathrm{ABD}$ and $\angle B A C$ ? <br> - $\angle \mathrm{ABD}=\angle \mathrm{BAC}$ <br> - $\angle \mathrm{ABD}>\angle \mathrm{BAC}$ <br> - $\angle \mathrm{ABD}<\angle \mathrm{BAC}$ <br> - none of above |
| Question 3 | Which of the following letters of the English alphabet has line symmetry? <br> - Q <br> - W <br> - P <br> - Z |


| Question 4 | In $\triangle \mathrm{PQR}$, what can be said about the line segment PM ? <br> - It is the bisector. <br> - It is the median. <br> - It is the diagonal. <br> - It is the altitude. |
| :---: | :---: |
| Question 5 | What is the order of rotational symmetry of the object in the figure alongside, about the point marked as ' $x$ '? <br> - 0 <br> - 2 <br> - 1 <br> - 3 |
| Question 6 | An angle of a linear pair is half of a right angle. What are the measures of the two angles? <br> - $90^{\circ}, 45^{\circ}$ <br> - $45^{\circ}, 135^{\circ}$ <br> - $90^{\circ}, 90^{\circ}$ <br> - $60^{\circ}, 120^{\circ}$ |
| Question 7 | In $\triangle \mathrm{PQR}$, length of the side QR is less than twice the length of the side $P Q$ by 2 cm . Length of the side PR exceeds the length of the side PQ by 10 cm . The perimeter is 40 cm . The length of the smallest side of the $\triangle \mathrm{PQR}$ is: <br> - 6 cm <br> - 8 cm <br> - 7 cm <br> - 10 cm |


| Question 8 | If the exterior angle of a triangle is $108^{\circ}$ and one of the interior opposite angle is $38^{\circ}$. The other interior opposite angle is <br> - $138^{\circ}$ <br> - $60^{\circ}$ <br> - $70^{\circ}$ <br> - $72^{\circ}$ |
| :---: | :---: |
| Question 9 | In the quadrilateral $\mathrm{ACBD}, \mathrm{AC}=\mathrm{AD}$ and AB bisects $\angle A$. If $\triangle A B C \cong \triangle A B D$, then what is the relation between BC and BD ? <br> - $\mathrm{BC}>\mathrm{BD}$ <br> - $\mathrm{BC}<\mathrm{BD}$ <br> - $\mathrm{BC}=\mathrm{BD}$ <br> - none of above |
| Question 10 | What is the number of lines of symmetry of the design in the figure? <br> - 1 <br> - 2 <br> - 3 <br> - 0 |

## Answers

| Answer 1 | $\angle 2, \angle 3$ |
| :--- | :--- |
| Answer 2 | $\angle \mathrm{ABD}=\angle \mathrm{BAC}$ |
| Answer 3 | W |
| Answer 4 | It is the altitude. |
| Answer 5 | 2 |
| Answer 6 | $45^{\circ}, 135^{\circ}$ |
| Answer 7 | 8 cm |
| Answer 8 | $70^{\circ}$ |
| Answer 9 | $\mathrm{BC}=\mathrm{BD}$ |
| Answer 10 | 0 |

