



Lines and Angles; Triangles; Congruence of Triangles; Constructions; Symmetry, Reflection and Rotation; and Recognition of Solids

WORKSHEET 4

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

| Question 4 | In ΔPQR, what can be said about the line segment PM? |
|------------|---|
| | • It is the bisector. |
| | • It is the median. |
| | • It is the diagonal. |
| | • It is the altitude. M D M D |
| Question 5 | What is the order of rotational symmetry of the object in the figure alongside, about the point marked as 'x'? |
| | • 0 |
| | • 2 |
| | • 1 |
| | • 3 |
| Question 6 | An angle of a linear pair is half of a right angle. What are the measures of the two angles? |
| | • 90°, 45° |
| | • 45°, 135° |
| | • 90°, 90° |
| | • 60°, 120° |
| Question 7 | In ΔPQR , length of the side QR is less than twice the length of the side PQ 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 ΔPQR is: |
| | • 6 cm |
| | • 8 cm |
| | • 7 cm |
| | • 10 cm |

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

Answers

| Answer 1 | ∠2, ∠3 |
|-----------|---------------------|
| Answer 2 | ∠ABD = ∠BAC |
| Answer 3 | W |
| Answer 4 | It is the altitude. |
| Answer 5 | 2 |
| Answer 6 | 45°, 135° |
| Answer 7 | 8 cm |
| Answer 8 | 70° |
| Answer 9 | BC = BD |
| Answer 10 | 0 |