Multiple choice questions - Angles, polygons and properties of shapes

Year: Year 10 · 10

Question 1 Angles on a straight line add up to

- ◯ **A.** 90°
- ◯ **B.** 180°
- ◯ **C.** 270°
- ◯ **D.** 360°

Question 2 Two angles of a triangle are 50° and 60°. The third is

- ◯ **A.** 60°
- ◯ **B.** 70°
- ◯ **C.** 80°
- ◯ **D.** 110°

Question 3 The sum of the interior angles of a pentagon is

- ◯ **A.** 360°
- ◯ **B.** 450°
- ◯ **C.** 540°
- ◯ **D.** 720°

Question 4 The exterior angle of a regular hexagon is

- ◯ **A.** 30°
- ◯ **B.** 45°
- ◯ **C.** 60°
- ◯ **D.** 120°

Question 5 A regular polygon has exterior angle 36°. It has

- ◯ **A.** 8 sides
- ◯ **B.** 9 sides
- ◯ **C.** 10 sides
- ◯ **D.** 12 sides

Question 6 Co-interior angles

- ◯ **A.** are equal
- ◯ **B.** add up to 180°
- ◯ **C.** add up to 90°

- ◯ **D.** add up to 360°

Question 7 Alternate angles are

- ◯ **A.** equal
- ◯ **B.** supplementary
- ◯ **C.** complementary
- ◯ **D.** right angles

Question 8 Which is NOT a condition for congruent triangles?

- ◯ **A.** SSS
- ◯ **B.** SAS
- ◯ **C.** AAA
- ◯ **D.** RHS

Question 9 The longest chord in a circle is the

- ◯ **A.** radius
- ◯ **B.** diameter
- ◯ **C.** tangent
- ◯ **D.** arc

Question 10 An isosceles triangle has apex angle 80°. Each base angle is

- ◯ **A.** 40°
- ◯ **B.** 50°
- ◯ **C.** 80°
- ◯ **D.** 100°

Answer grid - Angles, polygons and properties of shapes

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Question	Answer	Explanation
1	**B**	Straight line $= 180^\circ$.
2	**B**	$180 - 110$.
3	**C**	3×180.
4	**C**	$\frac{360}{6}$.
5	**C**	$\frac{360}{36}$.
6	**B**	They lie between parallel lines on the same side.
7	**A**	Z shape.
8	**C**	AAA gives similar triangles.
9	**B**	It passes through the centre.
10	**B**	$\frac{180-80}{2}$.