Multiple choice questions - Constructions and congruence

Year: Year 8 · 10

Question 1 Which set of lengths can form a triangle?

- ◯ **A.** 2, 3, 6
- ◯ **B.** 4, 4, 9
- ◯ **C.** 5, 6, 7
- ◯ **D.** 1, 2, 4

Question 2 The perpendicular bisector of AB meets AB at an angle of

- ◯ **A.** 45°
- ◯ **B.** 60°
- ◯ **C.** 90°
- ◯ **D.** 180°

Question 3 When you bisect an 80° angle each part is

- ◯ **A.** 20°
- ◯ **B.** 40°
- ◯ **C.** 60°
- ◯ **D.** 80°

Question 4 Which test does NOT prove congruence?

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

Question 5 Congruent shapes have

- ◯ **A.** same shape only
- ◯ **B.** same size only
- ◯ **C.** same shape and size
- ◯ **D.** same area only

Question 6 Two triangles have sides 5, 5 and an included angle of 30°. They are congruent by

- ◯ **A.** SSS
- ◯ **B.** ASA

- ◯ **C.** RHS
- ◯ **D.** SAS

Question 7 To construct a 60° angle you use

- ◯ **A.** a protractor only
- ◯ **B.** arcs of equal radius
- ◯ **C.** a set square only
- ◯ **D.** guesswork

Question 8 ABC is congruent to XYZ. Angle B equals angle

- ◯ **A.** X
- ◯ **B.** Y
- ◯ **C.** Z
- ◯ **D.** A

Question 9 The set of points 5 cm from a point is a

- ◯ **A.** line
- ◯ **B.** square
- ◯ **C.** circle
- ◯ **D.** triangle

Question 10 The shared side AM in two triangles proves which condition?

- ◯ **A.** Side equal
- ◯ **B.** Angle equal
- ◯ **C.** Right angle
- ◯ **D.** Parallel

Answer grid - Constructions and congruence

Year: Year 8

Question	Answer	Explanation
1	**C**	$5 + 6 > 7$.
2	**C**	Perpendicular means 90 degrees.
3	**B**	$80 \div 2$.
4	**C**	AAA gives similar triangles.
5	**C**	Congruent means identical.
6	**D**	Two sides and the included angle.
7	**B**	Equal arcs form an equilateral triangle.
8	**B**	B matches Y.
9	**C**	A circle.
10	**A**	Common side is equal to itself.