Grade 7 geometry test

NAME	DATE	SCORE / 8

Answer each question. Show your work.

1 Two angles of a triangle are 45° and 87°. What is the measure, in degrees, of the third angle?

2 Two angles are complementary. One angle measures (4x + 22)°, and the other angle measures 48°. What is the value of x?

3 Two angles measure 57° and 33°. Are the two angles complementary, supplementary or neither?

- ◯ Complementary
- ◯ Supplementary
- ◯ Neither

4 One side of a triangle is extended to make an exterior angle of 101°. The two interior angles that are not next to the exterior angle measure 32° and x°. What is the value of x?

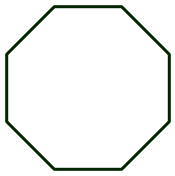
5 Maya wants to draw a triangle with sides of 5 cm, 8 cm and 15 cm. How many different triangles can Maya draw with these measurements?

- ◯ Exactly one triangle
- ◯ More than one triangle
- ◯ No triangle

6 Two straight lines cross at a point, making four angles. One of the angles measures 115°. In order around the point from that angle, what are the measures of the other three angles?

- ◯ 65°, 65° and 65°
- ◯ 65°, 115° and 65°
- ◯ 115°, 115° and 115°
- ◯ 115°, 65° and 115°

7 What is the sum, in degrees, of the interior angles of the polygon below?



8 Which three lengths could be the side lengths of a triangle?

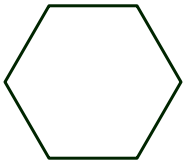
- ◯ 6 metres, 4 metres and 12 metres
- ◯ 10 metres, 2 metres and 7 metres
- ◯ 9 metres, 15 metres and 8 metres
- ◯ 9 metres, 7 metres and 2 metres

Grade 7 geometry test

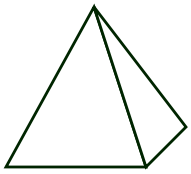
NAME	DATE	SCORE / 3

Answer each question. Show your work.

9 The shape below is a regular hexagon. What is the measure, in degrees, of one exterior angle of the shape?

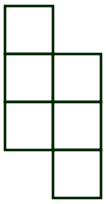


10 The square pyramid below is cut by a plane parallel to its base. What is the shape of the cross section?



◯ Triangle ◯ Square ◯ Trapezoid

11 What is the order of rotational symmetry of the shape below, if the shape has any?



◯ Order 4 ◯ Order 2

◯ No rotational symmetry

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1	48	2	5	3	Complementary
4	69	5	No triangle	6	65°, 115° and 65°
7	1080	8	9 metres, 15 metres and 8 metres	9	60
10	Square	11	Order 2		