Angles

Answers

KS3 Maths topic practice

This topic online

Q	Answer	Marks
1	**a)** A and C **b)** parallelogram	2
2	**a)** SAS **b)** not necessarily congruent **c)** RHS **d)** ASA	4
3	x = 35	3
4	**a)** x = 62 (corresponding angles are equal) **b)** z = 62 (alternate angles are equal) **c)** y = 118 (angles on a straight line add up to 180°)	3
5	118°	4
6	Angle PQR = 68 (straight line), angle PRQ = 180 - 44 - 68 = 68 (angles in a triangle), so two angles are equal and the triangle is isosceles.	4
7	Angle ACB = 180 - a - b (angles in a triangle add up to 180°), so angle ACD = 180 - (180 - a - b) = a + b (angles on a straight line add up to 180°)	3
8	**a)** exterior 45°, interior 135° **b)** Hexagon: 120° × 3 = 360°, so three fit round a point. Pentagon: 108°, and 360 is not a multiple of 108, so there is a gap	4
9	135°	4
10	55°	5
11	Triangle ABD is congruent to triangle ACD by SAS	3
12	82°	5
EXTENSION QUESTIONS		
13	**a)** 150° **b)** 15°	5

Full worked solutions, written out by hand, are on the solutions sheet for this topic.

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