# UNIT H1 *Angles and Symmetry* Mental Maths Questions

## M H1 A *(no calculator)*

1. Two angles in a triangle each measure $35°$. What is the size of the third angle? ($110°$)
2. What is the size of an angle in an equilateral triangle? ($60°$)
3. What is the name of a six-sided polygon? (hexagon)
4. What is the size of the third angle in a right-angled triangle if another angle is $42°$? ($48°$)
5. What is the name given to a quadrilateral which has two pairs of parallel sides of unequal lengths and no right angle? (parallelogram)
6. How many sides does an octagon have? (8)
7. How many lines of symmetry does a square have? (4)
8. What is the sum of the interior angles of a triangle? ($180°$)
9. What is the sum of the interior angles of a quadrilateral? ($360°$)
10. What is the order of the rotational symmetry of a rectangle with two pairs of unequal sides? (2)

## M H1 B *(no calculator)*

1. What is the name of an eight-sided polygon? (octagon)
2. In an isosceles triangle, one angle is $66°$.
   What is the size of the other two equal angles? ($57°$)
3. What is the name given to a quadrilateral which has two pairs of parallel sides of unequal length and in which all the internal angles are right angles? (rectangle)
4. How many sides does a pentagon have? (5)
5. How many lines of symmetry does a regular hexagon have? (6)
6. What is the order of the rotational symmetry of a square about its centre point? (4)
7. What is the size of the third angle in a triangle if the other two angles measure $37°$ and $49°$? ($94°$)
8. What is the name of a seven-sided polygon? (heptagon)
9. In an isosceles triangle, two equal angles each measure $53°$.
   What is the size of the other angle? ($74°$)
10. What is the name of a triangle with all three sides equal? (equilateral)

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