**Angles in Regular Polygons**

Calculate the sum of the interior angles of a polygon with:

(a) 16 sides (b) 11 sides

(c) 20 sides (d) 14 sides

Calculate the size of the exterior and interior angles of a polygon with:

(a) 15 sides (b) 12 sides

(c) 18 sides (d) 36 sides

Calculate the number of sides of a polygon whose exterior angle is:

(a) 12o (b) 20o

(c) 18o (d) 40o

Calculate the number of sides of a polygon whose interior angle is:

(a) $120°$ (b) $162°$

(c) $160°$ (d) $174°$

(a) Explain why it is not possible to have a polygon with an exterior angle of $23°$.

(b) Explain why it is not possible to have a polygon with an interior angle of $143°$.

(a) Find the name of the regular polygon whose interior angle is three times that of its exterior angle.

(b) The interior angle of a regular polygon is 11 times its exterior angle. How many sides does the regular polygon have?

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