Triangle and polygon angles — Further practice

Year 8, upper volume • text pp. 5–12 • foundation lessons 3–6

Further practice 11

A triangle has angles $x°$,$2x°$ and $3x°$. Find x.

Further practice 12

An exterior angle is $121°$ and one remote interior angle is $54°$. Find the other remote interior angle.

Further practice 13

Find the interior-angle sum of a convex octagon.

Further practice 14

Find each interior angle of a regular convex decagon.

Extension 15

A convex polygon has interior-angle sum $1980°$. Find its number of sides.

Extension 16

Can $20°$,$70°$,$100°$ be the interior angles of a triangle?

A. Yes: all are positive.
B. Yes: one angle is obtuse.
C. Only for an isosceles triangle.
D. No: their sum is $190°$.