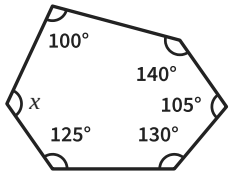
Sum of interior angles

Exit ticket ANSWERS Name _____

1. Work out the sum of the interior angles of a polygon with 14 sides.

2160°

2. A hexagon is not regular. Find angle x.



x = 120°

3. A regular polygon has 18 sides. Work out the size of each interior angle.

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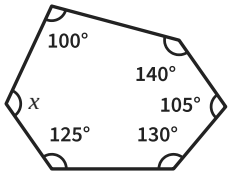

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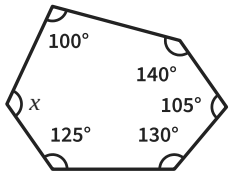

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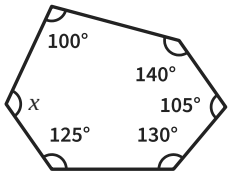

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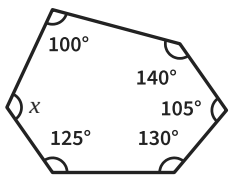

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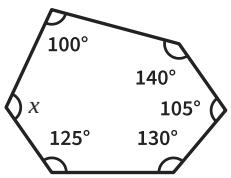

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Exit ticket Sum of interior angles

NEXT LESSON

1 **Work out the sum of the interior angles of a polygon with 14 sides.**

2160°

TESTS Sum of interior angles = (n − 2) × 180°

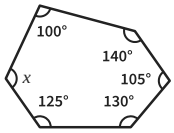
LOOK FOR
- *2520°* did 14 × 180°: the − 2 left out
- *−346°* worked out 2 × 180 first: the bracket comes first

FIX IT

Work out the sum of the interior angles of a polygon with 9 sides. *1260°*

---

2 **A hexagon is not regular. Find angle x.**



x = 120°

TESTS A missing angle: the angle sum, then take away the angles given

LOOK FOR
- *480°* used 6 × 180° = 1080° for the sum
- *600°* added the five angles and stopped

FIX IT

A pentagon has angles of 100°, 110°, 95°, 120° and x.
Find x. *115°*

---

3 **A regular polygon has 18 sides. Work out the size of each interior angle.**

160°

TESTS Each interior angle of a regular polygon = sum ÷ number of sides

LOOK FOR
- *2880°* the sum of the angles, not one angle
- *20°* the exterior angle, 360° ÷ 18

FIX IT

A regular polygon has 12 sides. Work out the size of each interior angle. *150°*