

## Watch. Practice. Understand. | Lesson 083

Properties of A Trapezoid, Midsegment of A Trapezoid, and Proving an Isosceles Trapezoid

Watch the matching video: <https://www.youtube.com/watch?v=zXDOejm5XJw>

Practice focus: Polygons and quadrilaterals

Original extra practice matched to the listed lesson topic.

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Show your reasoning and check units.

**01** Find the sum of the interior angles of a hexagon.

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**02** A regular polygon has exterior angle  $24^\circ$ . How many sides does it have?

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**03** A parallelogram has one angle  $70^\circ$ . Find all its angles.

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**04** A trapezoid has bases 8 and 14. Find its midsegment length.

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## Worked answers | Lesson 083

Properties of A Trapezoid, Midsegment of A Trapezoid, and Proving an Isosceles Trapezoid

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Practice focus: Polygons and quadrilaterals

Original extra practice matched to the listed lesson topic.

**01** Find the sum of the interior angles of a hexagon.

$$(6 - 2)180^\circ = 720^\circ.$$

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**02** A regular polygon has exterior angle  $24^\circ$ . How many sides does it have?

$$n = 360/24 = 15 \text{ sides.}$$

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**03** A parallelogram has one angle  $70^\circ$ . Find all its angles.

Opposite angles are equal; adjacent angles are supplementary. Angles:  $70^\circ$ ,  $110^\circ$ ,  $70^\circ$ ,  $110^\circ$ .

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**04** A trapezoid has bases 8 and 14. Find its midsegment length.

$$\text{Midsegment} = (8 + 14)/2 = 11.$$