

GEOMETRY & REASONING

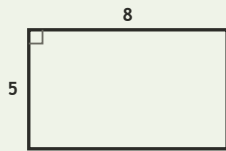
Spatial Lab • Sides, Perimeter, and Difference

Objective: Reason about shapes: perimeter, and how much longer one side is.

DO THIS Add the sides to find perimeter. Subtract to compare two sides.

SHAPE FACTS All sides are in centimetres. Add for perimeter; subtract to compare.

EXAMPLE



Perimeter (all sides in cm):

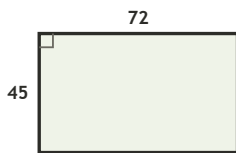
$$8 + 5 + 8 + 5 = \underline{26} \text{ cm}$$

Long side – short side:

$$8 - 5 = \underline{3} \text{ cm}$$

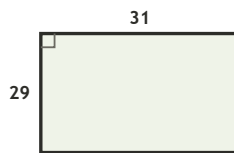
COMPARE SIDES How much longer is the long side, in cm?

1



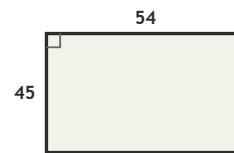
$$72 - 45 = \square \text{ cm longer}$$

2



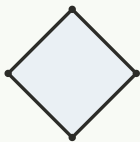
$$31 - 29 = \square \text{ cm longer}$$

3

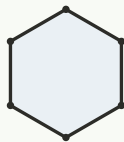


$$54 - 45 = \square \text{ cm longer}$$

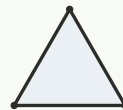
COUNT THE SIDES Write how many sides each shape has.



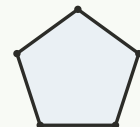
sides: ___



sides: ___



sides: ___



sides: ___

FIND THE PERIMETER Add all four sides, in cm.

1

Rectangle 69 by 31 cm. Perimeter?

$$69 + 31 + 69 + 31 = \square \text{ cm}$$

2

Rectangle 40 by 15 cm. Perimeter?

$$40 + 15 + 40 + 15 = \square \text{ cm}$$

3

Rectangle 28 by 14 cm. Perimeter?

$$28 + 14 + 28 + 14 = \square \text{ cm}$$

4

Rectangle 44 by 26 cm. Perimeter?

$$44 + 26 + 44 + 26 = \square \text{ cm}$$

5

Rectangle 56 by 29 cm. Perimeter?

$$56 + 29 + 56 + 29 = \square \text{ cm}$$

6

Rectangle 38 by 22 cm. Perimeter?

$$38 + 22 + 38 + 22 = \square \text{ cm}$$

I used: addition (perimeter) subtraction (compare) counting (sides)

TEACHER EDITION

GEOMETRY & REASONING

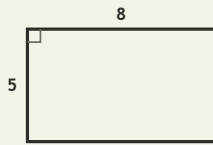
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Objective: Reason about shapes: perimeter, and how much longer one side is.

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EXAMPLE



Perimeter (all sides in cm):

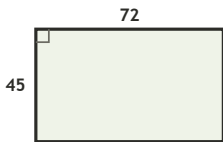
$$8 + 5 + 8 + 5 = \underline{26} \text{ cm}$$

Long side - short side:

$$8 - 5 = \underline{3} \text{ cm}$$

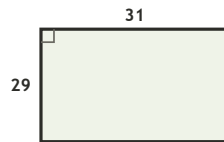
COMPARE SIDES How much longer is the long side, in cm?

1



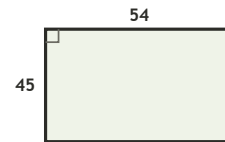
$$72 - 45 = \underline{27} \text{ cm longer}$$

2



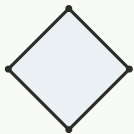
$$31 - 29 = \underline{2} \text{ cm longer}$$

3

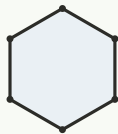


$$54 - 45 = \underline{9} \text{ cm longer}$$

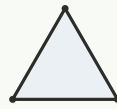
COUNT THE SIDES Write how many sides each shape has.



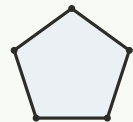
sides: 4



sides: 6



sides: 3



sides: 5

FIND THE PERIMETER Add all four sides, in cm.

1

Rectangle 69 by 31 cm. Perimeter?

$$69 + 31 + 69 + 31 = \underline{200} \text{ cm}$$

2

Rectangle 40 by 15 cm. Perimeter?

$$40 + 15 + 40 + 15 = \underline{110} \text{ cm}$$

3

Rectangle 28 by 14 cm. Perimeter?

$$28 + 14 + 28 + 14 = \underline{84} \text{ cm}$$

4

Rectangle 44 by 26 cm. Perimeter?

$$44 + 26 + 44 + 26 = \underline{140} \text{ cm}$$

5

Rectangle 56 by 29 cm. Perimeter?

$$56 + 29 + 56 + 29 = \underline{170} \text{ cm}$$

6

Rectangle 38 by 22 cm. Perimeter?

$$38 + 22 + 38 + 22 = \underline{120} \text{ cm}$$

TEACHER NOTES Answer key & guidance

Answers: _____ perimeters and side differences
Common error: Adding only two sides for perimeter

Strategy: Perimeter = sum of sides; compare with subtraction
Prompt: "How many sides must you add?"

I used: addition (perimeter) subtraction (compare) counting (sides)