

GEOMETRY & REASONING

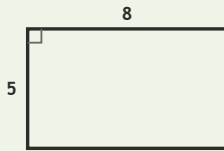
Spatial Lab • Sides, Perimeter, and Difference

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):

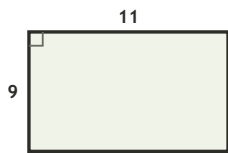
$$8 + 5 + 8 + 5 = \underline{26} \text{ cm}$$

Long side - short side:

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

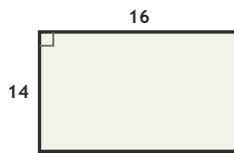
COMPARE SIDES How much longer is the long side, in cm?

1



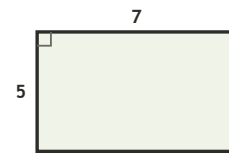
$$11 - 9 = \square \text{ cm longer}$$

2



$$16 - 14 = \square \text{ cm longer}$$

3

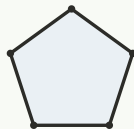


$$7 - 5 = \square \text{ cm longer}$$

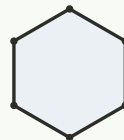
COUNT THE SIDES Write how many sides each shape has.



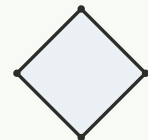
sides: ___



sides: ___



sides: ___



sides: ___

FIND THE PERIMETER Add all four sides, in cm.

1

Rectangle 18 by 17 cm. Perimeter?

$$18 + 17 + 18 + 17 = \square \text{ cm}$$

2

Rectangle 13 by 10 cm. Perimeter?

$$13 + 10 + 13 + 10 = \square \text{ cm}$$

3

Rectangle 16 by 11 cm. Perimeter?

$$16 + 11 + 16 + 11 = \square \text{ cm}$$

4

Rectangle 17 by 7 cm. Perimeter?

$$17 + 7 + 17 + 7 = \square \text{ cm}$$

5

Rectangle 18 by 16 cm. Perimeter?

$$18 + 16 + 18 + 16 = \square \text{ cm}$$

6

Rectangle 8 by 6 cm. Perimeter?

$$8 + 6 + 8 + 6 = \square \text{ cm}$$

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

TEACHER EDITION

GEOMETRY & REASONING

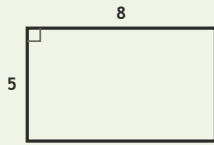
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Objective: Reason about shapes: perimeter, and how much longer one side is.

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EXAMPLE



Perimeter (all sides in cm):

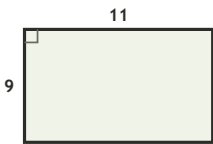
$$8 + 5 + 8 + 5 = \underline{26} \text{ cm}$$

Long side - short side:

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

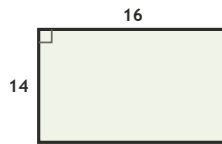
COMPARE SIDES How much longer is the long side, in cm?

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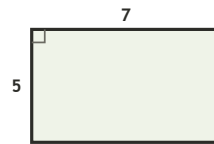
$$11 - 9 = \underline{2} \text{ cm longer}$$

2



$$16 - 14 = \underline{2} \text{ cm longer}$$

3

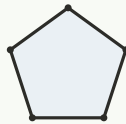


$$7 - 5 = \underline{2} \text{ cm longer}$$

COUNT THE SIDES Write how many sides each shape has.



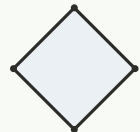
sides: 3



sides: 5



sides: 6



sides: 4

FIND THE PERIMETER Add all four sides, in cm.

1

Rectangle 18 by 17 cm. Perimeter?

$$18 + 17 + 18 + 17 = \underline{70} \text{ cm}$$

2

Rectangle 13 by 10 cm. Perimeter?

$$13 + 10 + 13 + 10 = \underline{46} \text{ cm}$$

3

Rectangle 16 by 11 cm. Perimeter?

$$16 + 11 + 16 + 11 = \underline{54} \text{ cm}$$

4

Rectangle 17 by 7 cm. Perimeter?

$$17 + 7 + 17 + 7 = \underline{48} \text{ cm}$$

5

Rectangle 18 by 16 cm. Perimeter?

$$18 + 16 + 18 + 16 = \underline{68} \text{ cm}$$

6

Rectangle 8 by 6 cm. Perimeter?

$$8 + 6 + 8 + 6 = \underline{28} \text{ cm}$$

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)