

GEOMETRY & REASONING

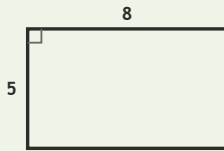
Spatial Lab • Sides, Perimeter, and Difference

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):

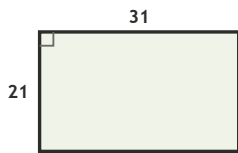
$$8 + 5 + 8 + 5 = \underline{26} \text{ cm}$$

Long side – short side:

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

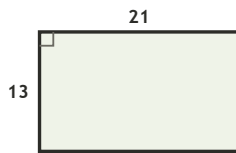
COMPARE SIDES How much longer is the long side, in cm?

1



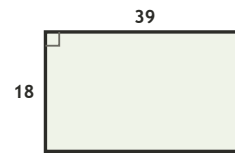
$$31 - 21 = \square \text{ cm longer}$$

2



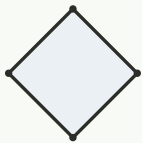
$$21 - 13 = \square \text{ cm longer}$$

3

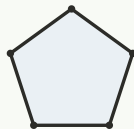


$$39 - 18 = \square \text{ cm longer}$$

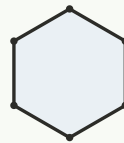
COUNT THE SIDES Write how many sides each shape has.



sides: ___



sides: ___



sides: ___



sides: ___

FIND THE PERIMETER Add all four sides, in cm.

1

Rectangle 26 by 17 cm. Perimeter?

$$26 + 17 + 26 + 17 = \square \text{ cm}$$

2

Rectangle 24 by 20 cm. Perimeter?

$$24 + 20 + 24 + 20 = \square \text{ cm}$$

3

Rectangle 26 by 9 cm. Perimeter?

$$26 + 9 + 26 + 9 = \square \text{ cm}$$

4

Rectangle 15 by 8 cm. Perimeter?

$$15 + 8 + 15 + 8 = \square \text{ cm}$$

5

Rectangle 25 by 11 cm. Perimeter?

$$25 + 11 + 25 + 11 = \square \text{ cm}$$

6

Rectangle 36 by 27 cm. Perimeter?

$$36 + 27 + 36 + 27 = \square \text{ cm}$$

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

TEACHER EDITION

GEOMETRY & REASONING

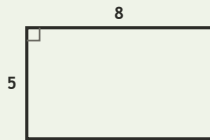
Spatial Lab • Sides, Perimeter, and Difference

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.

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EXAMPLE



Perimeter (all sides in cm):

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

Long side – short side:

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

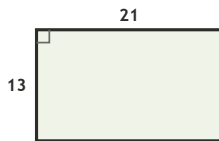
COMPARE SIDES How much longer is the long side, in cm?

1



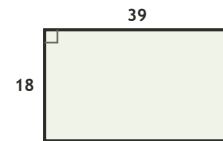
$$31 - 21 = \underline{10} \text{ cm longer}$$

2



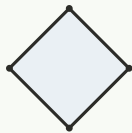
$$21 - 13 = \underline{8} \text{ cm longer}$$

3

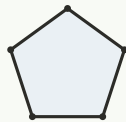


$$39 - 18 = \underline{21} \text{ cm longer}$$

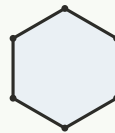
COUNT THE SIDES Write how many sides each shape has.



sides: 4



sides: 5



sides: 6



sides: 3

FIND THE PERIMETER Add all four sides, in cm.

1

Rectangle 26 by 17 cm. Perimeter?

$$26 + 17 + 26 + 17 = \underline{86} \text{ cm}$$

2

Rectangle 24 by 20 cm. Perimeter?

$$24 + 20 + 24 + 20 = \underline{88} \text{ cm}$$

3

Rectangle 26 by 9 cm. Perimeter?

$$26 + 9 + 26 + 9 = \underline{70} \text{ cm}$$

4

Rectangle 15 by 8 cm. Perimeter?

$$15 + 8 + 15 + 8 = \underline{46} \text{ cm}$$

5

Rectangle 25 by 11 cm. Perimeter?

$$25 + 11 + 25 + 11 = \underline{72} \text{ cm}$$

6

Rectangle 36 by 27 cm. Perimeter?

$$36 + 27 + 36 + 27 = \underline{126} \text{ cm}$$

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)