

GEOMETRY & REASONING

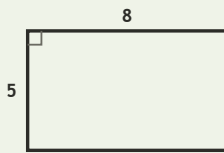
Spatial Lab • Sides, Perimeter, and Difference

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):

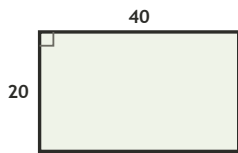
$$8 + 5 + 8 + 5 = \underline{26} \text{ cm}$$

Long side – short side:

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

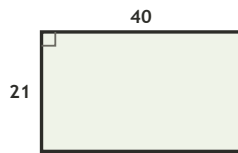
COMPARE SIDES How much longer is the long side, in cm?

1



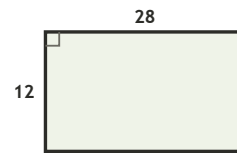
$$40 - 20 = \square \text{ cm longer}$$

2



$$40 - 21 = \square \text{ cm longer}$$

3

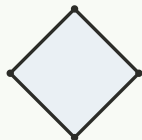


$$28 - 12 = \square \text{ cm longer}$$

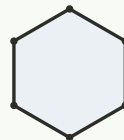
COUNT THE SIDES Write how many sides each shape has.



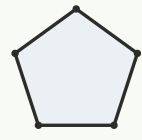
sides: ___



sides: ___



sides: ___



sides: ___

FIND THE PERIMETER Add all four sides, in cm.

1

Rectangle 37 by 31 cm. Perimeter?

$$37 + 31 + 37 + 31 = \square \text{ cm}$$

2

Rectangle 40 by 22 cm. Perimeter?

$$40 + 22 + 40 + 22 = \square \text{ cm}$$

3

Rectangle 39 by 17 cm. Perimeter?

$$39 + 17 + 39 + 17 = \square \text{ cm}$$

4

Rectangle 14 by 6 cm. Perimeter?

$$14 + 6 + 14 + 6 = \square \text{ cm}$$

5

Rectangle 34 by 13 cm. Perimeter?

$$34 + 13 + 34 + 13 = \square \text{ cm}$$

6

Rectangle 39 by 32 cm. Perimeter?

$$39 + 32 + 39 + 32 = \square \text{ cm}$$

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

TEACHER EDITION

GEOMETRY & REASONING

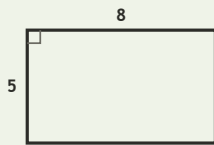
Spatial Lab • Sides, Perimeter, and Difference

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.

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

EXAMPLE



Perimeter (all sides in cm):

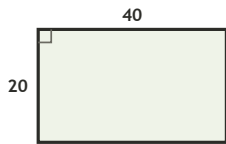
$$8 + 5 + 8 + 5 = \underline{26} \text{ cm}$$

Long side - short side:

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

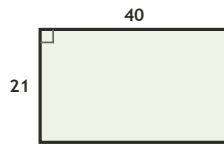
COMPARE SIDES How much longer is the long side, in cm?

1



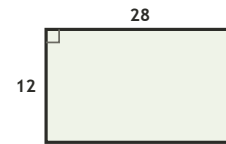
$$40 - 20 = \underline{20} \text{ cm longer}$$

2



$$40 - 21 = \underline{19} \text{ cm longer}$$

3

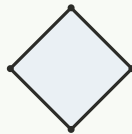


$$28 - 12 = \underline{16} \text{ cm longer}$$

COUNT THE SIDES Write how many sides each shape has.



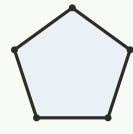
sides: 3



sides: 4



sides: 6



sides: 5

FIND THE PERIMETER Add all four sides, in cm.

1

Rectangle 37 by 31 cm. Perimeter?

$$37 + 31 + 37 + 31 = \underline{136} \text{ cm}$$

2

Rectangle 40 by 22 cm. Perimeter?

$$40 + 22 + 40 + 22 = \underline{124} \text{ cm}$$

3

Rectangle 39 by 17 cm. Perimeter?

$$39 + 17 + 39 + 17 = \underline{112} \text{ cm}$$

4

Rectangle 14 by 6 cm. Perimeter?

$$14 + 6 + 14 + 6 = \underline{40} \text{ cm}$$

5

Rectangle 34 by 13 cm. Perimeter?

$$34 + 13 + 34 + 13 = \underline{94} \text{ cm}$$

6

Rectangle 39 by 32 cm. Perimeter?

$$39 + 32 + 39 + 32 = \underline{142} \text{ cm}$$

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)