Maths answers

Monday

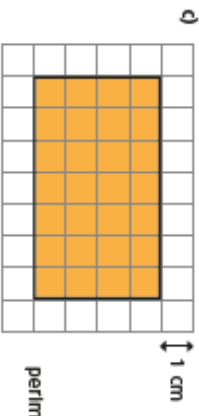**1** Work out the perimeter of each rectangle.

a)
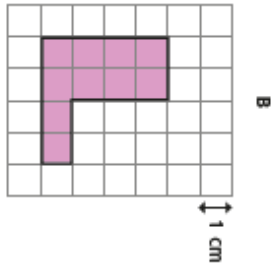
↕ 1 cm

perimeter = 12 cm

b)

↕ 1 cm

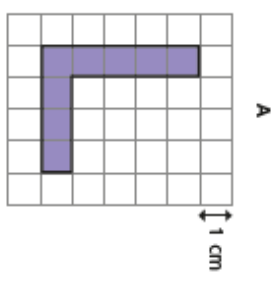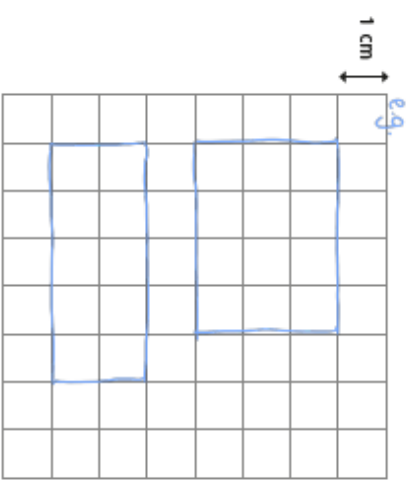perimeter = 22 cm

c)

↕ 1 cm

perimeter = 22 cm

2 Which of the hexagons has the greatest perimeter?
Show all your workings.
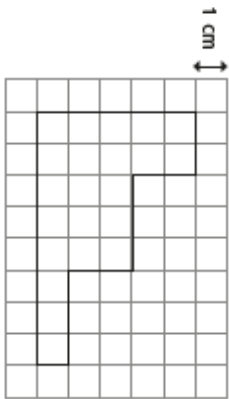
A

↕ 1 cm

B

↕ 1 cm

Shape A has the greatest perimeter.

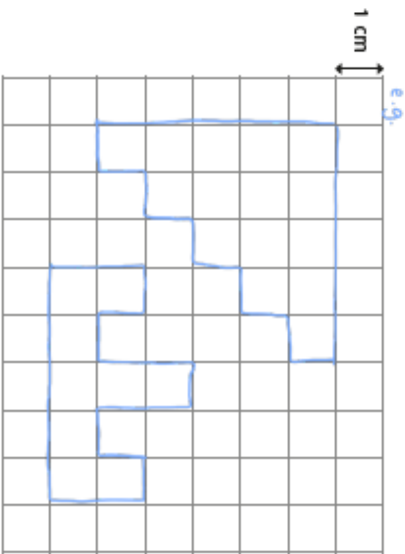**3** Draw two different rectangles with a perimeter of 14 cm.

1 cm

e.g.

Monday

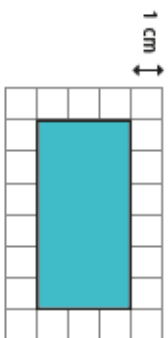**4** Work out the perimeter of the shape.

1 cm

26 cm

5 Draw two shapes with a perimeter of 20 cm.
Your shapes should not be rectangles.
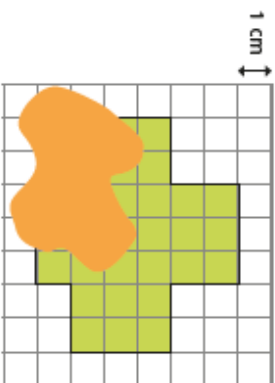
e.g.

1 cm

6 Work out the perimeter of the rectangle.

1 cm

18 cm

7 A shape is drawn on a square grid.
Part of the shape is hidden.

1 cm

What could the perimeter of the shape be?

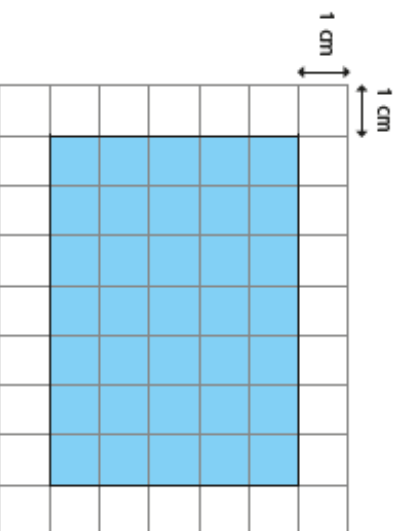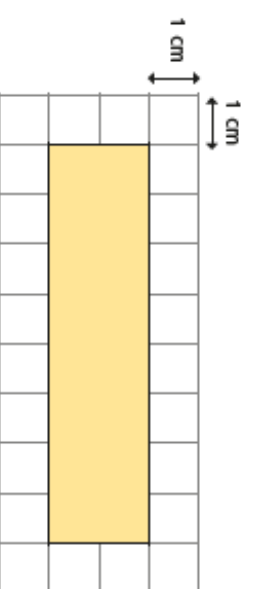Is there more than one answer?

e.g.

25 cm

Tuesday

1 Work out the perimeter of each rectangle.

a)

1 cm ↕ 1 cm ↔

$\boxed{5}$ cm + $\boxed{7}$ cm + $\boxed{5}$ cm + $\boxed{7}$ cm = $\boxed{24}$ cm

b)

1 cm ↔ 1 cm ↕

$\boxed{2}$ cm + $\boxed{8}$ cm + $\boxed{2}$ cm + $\boxed{8}$ cm = $\boxed{20}$ cm

c)

1 cm ↔ 1 cm ↕

$\boxed{1}$ cm + $\boxed{9}$ cm + $\boxed{1}$ cm + $\boxed{9}$ cm = $\boxed{20}$ cm

2 Work out the perimeter of the rectangles.

a)

4 cm
7 cm   7 cm
4 cm

$\boxed{22cm}$

b)

3 cm
12 cm

$\boxed{30cm}$

c)

9 cm
4 cm

$\boxed{26cm}$

d)

500 m
2 km
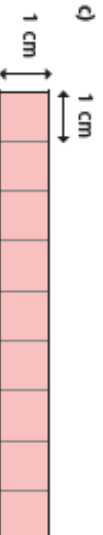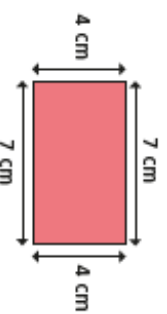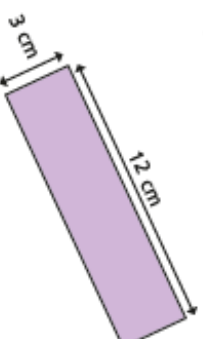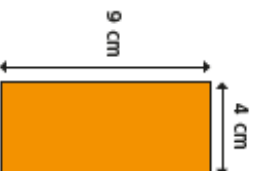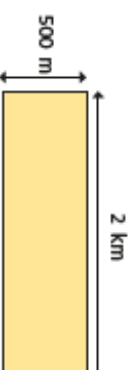
$\boxed{5km}$

Tuesday

3 Tommy is working out the perimeter of some rectangles.

5 cm

8 cm

8 cm + 5 cm = 13 cm
13 cm × 2 = 26 cm

Use Tommy's method to find the perimeter of these rectangles.

a)

4 cm

5 cm
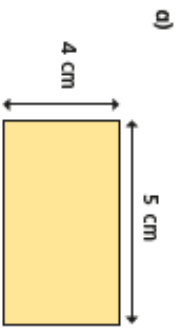
$\boxed{5}$ cm + $\boxed{4}$ cm = $\boxed{9}$ cm

$\boxed{9}$ cm × 2 = $\boxed{18}$ cm

b)

5 cm
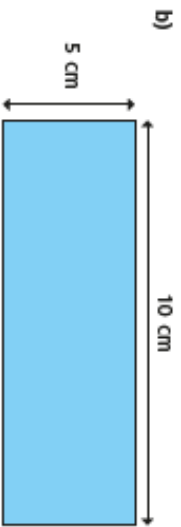
10 cm

$\boxed{10}$ cm + $\boxed{5}$ cm = $\boxed{15}$ cm

$\boxed{15}$ cm × 2 = $\boxed{30}$ cm

4 Each lolly stick is 8 cm long.
Find the perimeter of the shape.
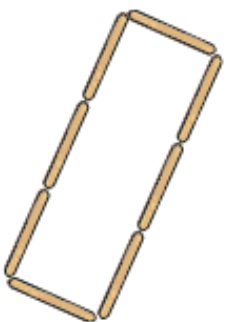
$\boxed{64\,cm}$

5 Each of these rectangles has a perimeter of 24 cm.
Work out the missing lengths and label the diagrams.

a)

$\boxed{2}$ cm

10 cm

b)

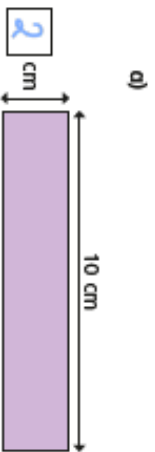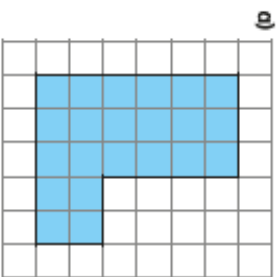$\boxed{3}$ cm

9 cm

c)

7 cm

5 cm
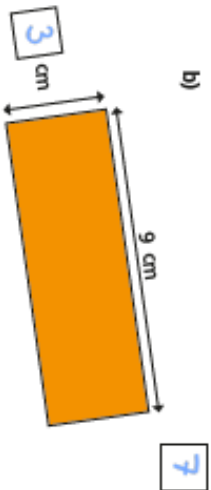
What do you notice?
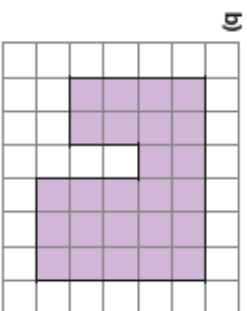Find any other rectangles that have the same perimeter.

Wednesday

1 The length of each square on the grid is 1 cm.

Work out the perimeter of the shapes.

a)

22 cm

b)

26 cm

2 Work out the perimeter of the shape.

8 cm

3 cm

3 cm 7 cm

10 cm

5 cm
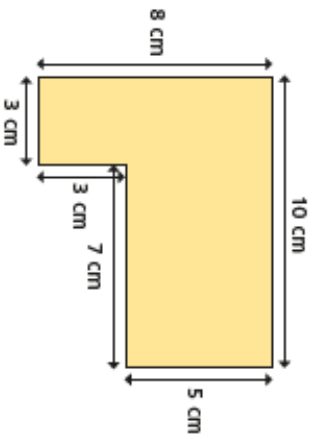
36 cm

3 a) Work out the missing lengths and label them on the diagram.

5 cm

5 cm

3 cm

4 cm

9 cm

8 cm
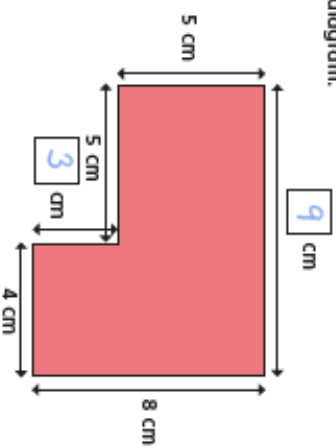
b) What is the perimeter of the shape?

34 cm

4 Work out the perimeter of each shape.

a)

9 cm

4 cm

5 cm

3 cm

36 cm

b)

3 cm

12 cm

2 cm

2 cm

34 cm

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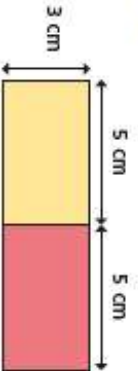
Wednesday
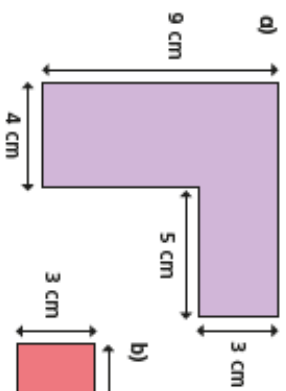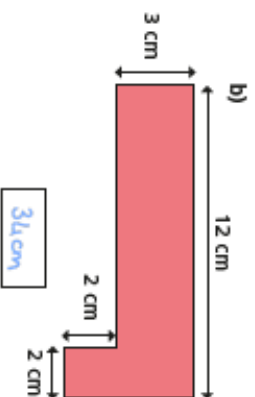
5 Mo puts two 5 cm by 3 cm rectangles next to each other.

3 cm

5 cm   5 cm

The perimeter of each small rectangle is 16 cm, so the perimeter of my larger rectangle must be 2 × 16 cm = 32 cm.
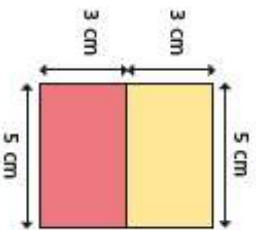
a) Is Mo correct? __No__

Work out the perimeter of the larger rectangle to check your answer.

26 cm

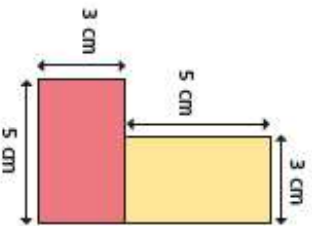b) Mo puts the rectangles together in different ways.
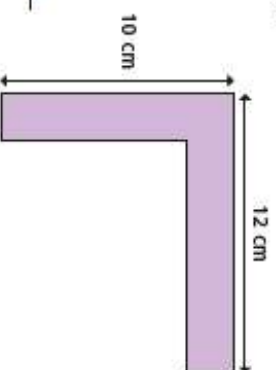Work out the perimeter of each large shape.

3 cm   3 cm

5 cm   5 cm

22cm

3 cm

5 cm

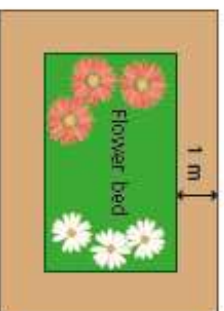5 cm

3 cm

26cm

6 Dani thinks there isn't enough information to work out the perimeter of the shape.

10 cm

12 cm

Is Dani correct? __No__

Explain your answer.

7 A rectangular flower bed is 5 m long and 3 m wide.
The path around the flower bed is 1 m wide.

Flower bed

1 m

a) What is the perimeter of the flower bed?
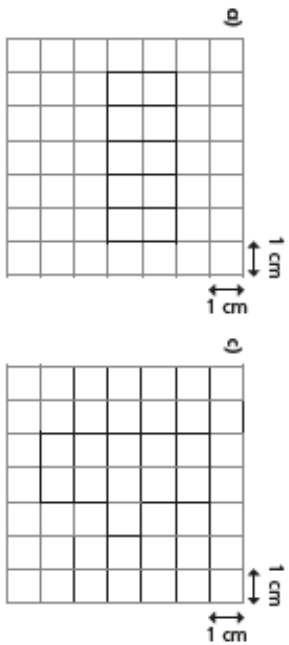
16cm

b) What is the perimeter of the outside of the path?
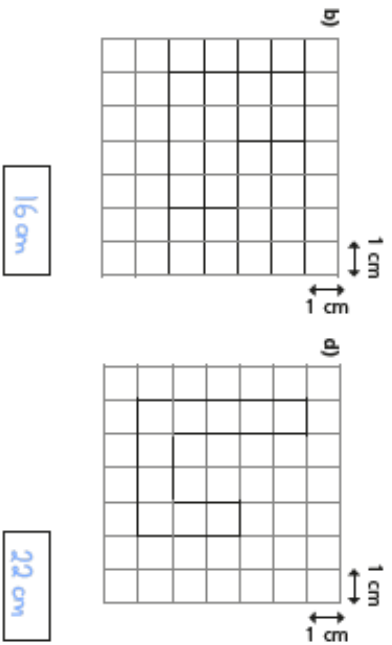
24cm

Thursday

1 Calculate the perimeter of each shape.

a)

1 cm
1 cm

14 cm

b)

1 cm
1 cm

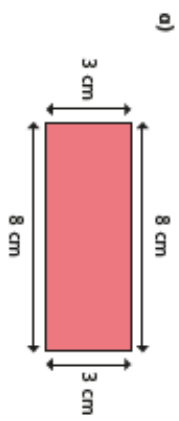16 cm

c)

1 cm
1 cm

16 cm

d)

1 cm
1 cm

22 cm

2 Calculate the perimeter of these shapes.

a)

3 cm

8 cm

3 cm

22 cm

b)

6 cm

8 cm

10 cm

24 cm

3 Calculate the perimeter of these shapes.

a)

7 cm

3 cm

5 cm

7 cm

4 cm

2 cm

28 cm

b)

7 cm

1 cm

3 cm

4 cm

6 cm

2 cm

7 cm

34 cm

Thursday
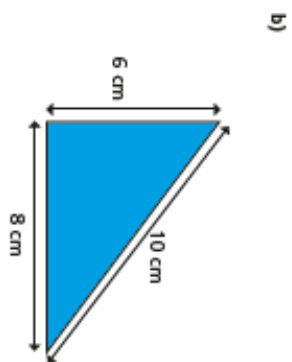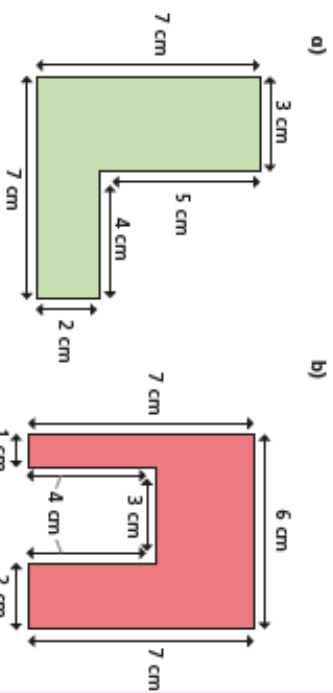
4

Work out the missing lengths on these shapes.

a)

7 cm, 3 cm, [9] cm, 5 cm, [4] cm, 6 cm, 4 cm

b)

6 cm, 10 cm, [7] cm, 2 cm, 3 cm, [8] cm

Discuss with a partner how you worked them out.
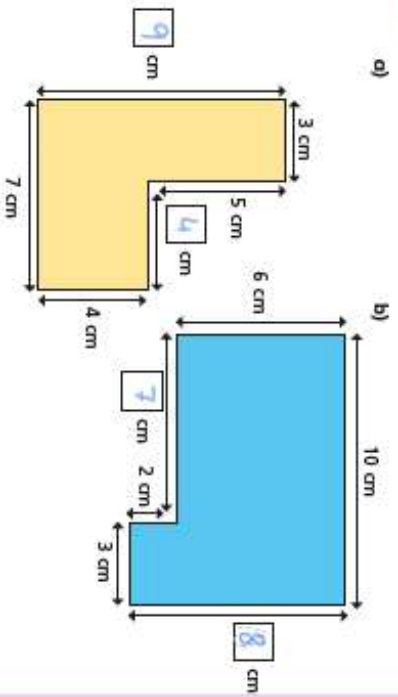
5

Calculate the perimeter of these shapes.

a)

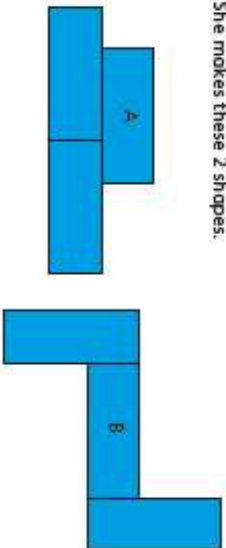2 cm, 4 cm, 9 cm, 10 cm

38cm

b)
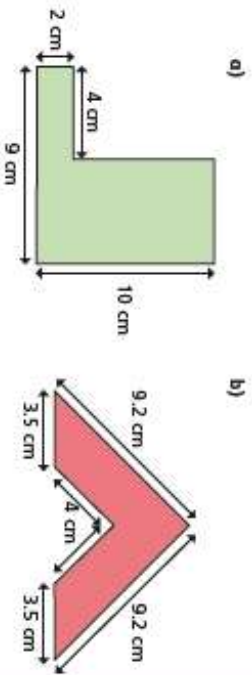
3.5 cm, 9.2 cm, 4 cm, 9.2 cm, 3.5 cm

33·4cm

6

Mo thinks that there is not enough information to calculate the perimeter of the shape.

Is he correct? How do you know?

12 cm, 17 cm, 9 cm, 3 cm
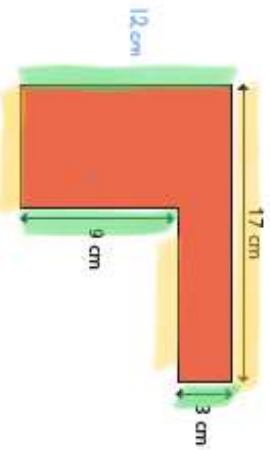
No. The perimeter is 56 cm

7

Rosie is making shapes made up of 3 rectangles.

Each rectangle has a length of 10 cm and a width of 4 cm.
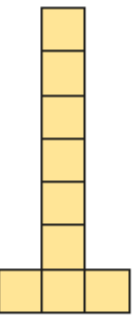
She makes these 2 shapes.

A

B

a) Which shape has the greatest perimeter? ___B___

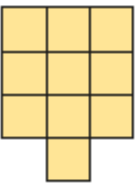b) What other shapes can you make with 3 rectangles? What is the perimeter of the shapes?

Friday

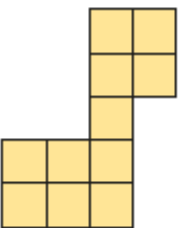**1** Count the squares in each shape to find the area.

A

The area is ⬚ 9 squares.
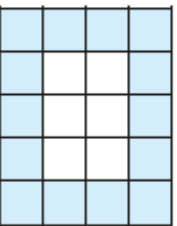
B

The area is ⬚ 10 squares.

C

The area is ⬚ 11 squares.

Which shape has the greatest area? ___C___

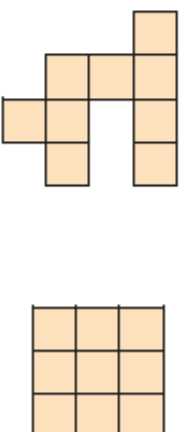**2** What is the area of the shaded part of the shape?

The area is ⬚ 14 squares.

3 Here is a kitchen tile.

a) What area of the tile is blue? ⬚ 4 squares

b) What area of the tile is white? ⬚ 6 squares

c) What is the total area of the tile? ⬚ 10 squares

4 These two shapes are made up of squares of the same size.

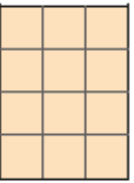Jack: These two shapes have the same area.

Rosie: The first shape is bigger as it takes up more space.

Who is correct? ___Jack___

Explain how you know.
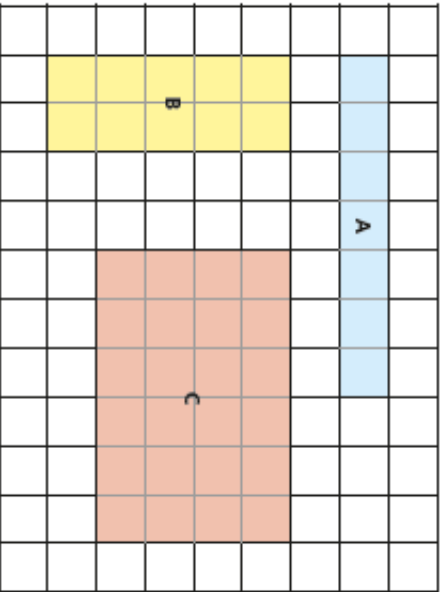
They both have an area as 9 squares

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Friday

5 Here is a rectangle.

a) The rectangle has `3` rows and `4` columns.

b) What is the area of the rectangle? `12` squares

c) How did you work out the area?

6 Find the area of each rectangle.
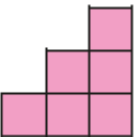
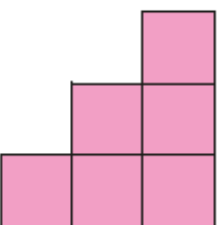A = `7` squares   B = `10` squares   C = `24` squares

7 Nijah and Eva are making shapes.

They each use 6 squares.
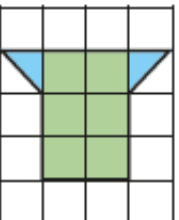
Nijah's shape   Eva's shape

The area of Nijah's shape is equal to the area of Eva's shape.
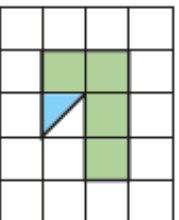
Is this true or false? _False_

How do you know?

They are not made using the same size shapes.

8 What is the area of each shape?

area = `7` squares   area = `4½` squares

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