Area and perimeter

1 Use the words to complete the sentences.

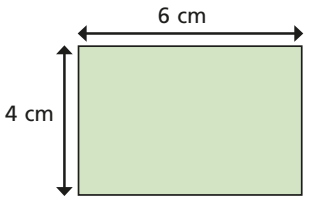
perimeter	cm^2	cm	m
area	m^2	inside	around

Area is the amount of space inside a two-dimensional shape. It can be measured in units such as cm^2 or m^2

Perimeter is the distance around a two-dimensional shape. It can be measured in units such as cm or m

2 Work out the areas and perimeters of the shapes.

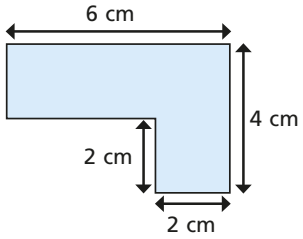
a)



perimeter = 20 cm

area = 24 cm^2

b)

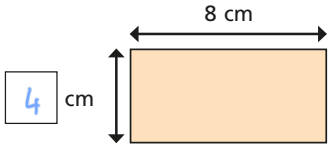


perimeter = 20 cm

area = 16 cm^2

3 Work out the missing values.

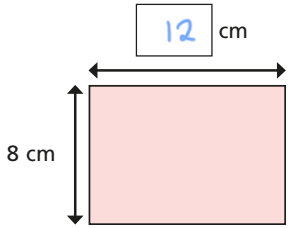
a)



area = 32 cm^2

perimeter = 24 cm

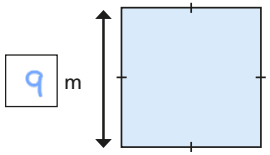
b)



area = 96 cm^2

perimeter = 40 cm

c)

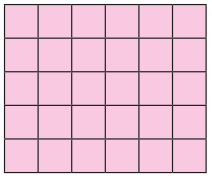


area = 81 m^2

perimeter = 36 m

4 Work out the areas and perimeters of the shapes.

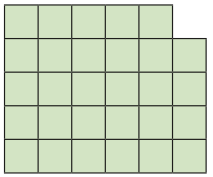
Shape A



area = 30 cm^2

perimeter = 22 cm

Shape B

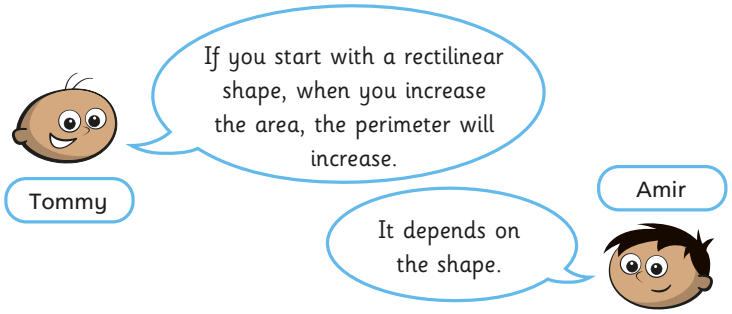


area = 29 cm^2

perimeter = 22 cm

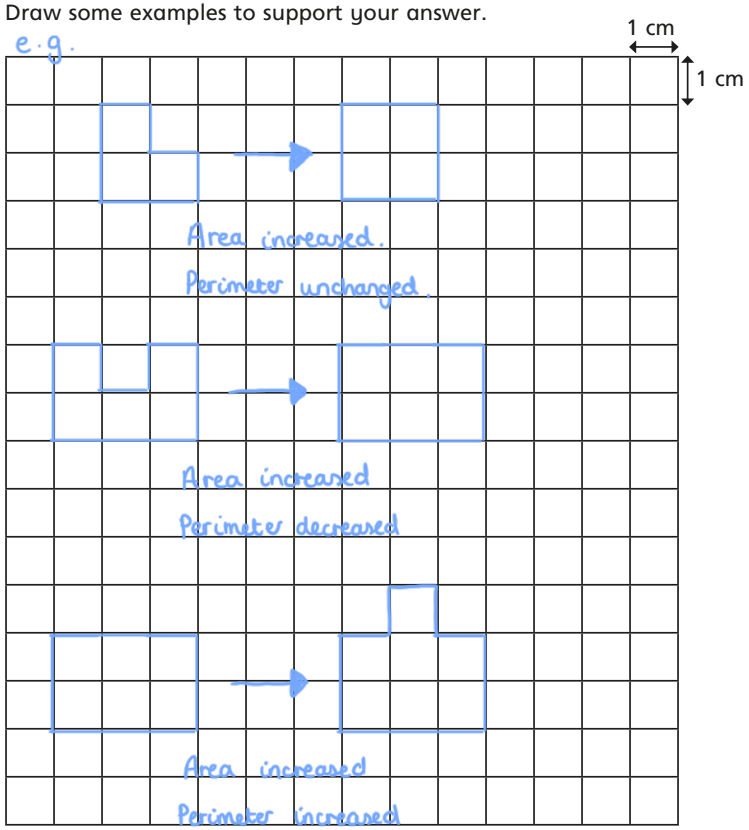
What do you notice?

5



Who do you agree with? Amir

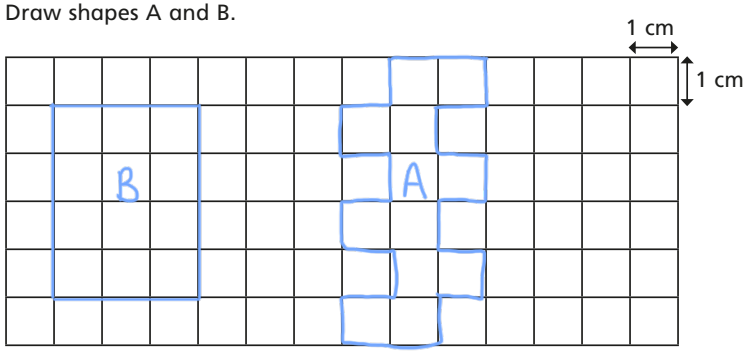
Draw some examples to support your answer.



6 Two rectilinear shapes, A and B, each have an area of 12 squares.

- Shape A has the largest perimeter possible.
- Shape B has the smallest perimeter possible.

Draw shapes A and B.

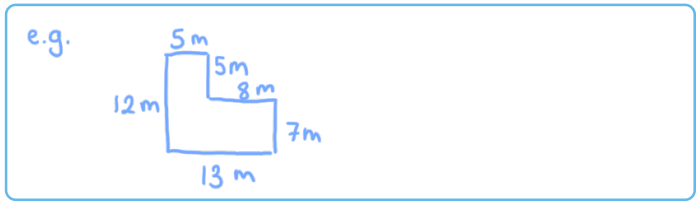


What do you notice?

7 Mr Jones has 50 m of fencing.

He wants to make a rectilinear enclosure using all the fencing.

a) Draw an example of a shape he could make. Give units on your diagram.



b) What is the greatest possible area of the enclosure? 156 m^2

c) What is the smallest possible area of the enclosure? 24 m^2