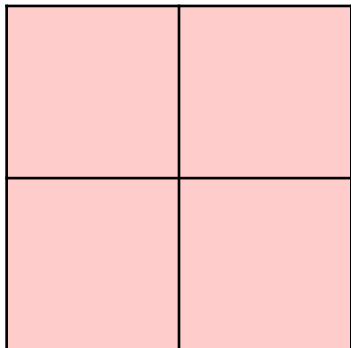


Calculate Perimeter

1a. This shape has been made using identical squares. One square has a perimeter of 12cm. What is the perimeter of the whole shape?

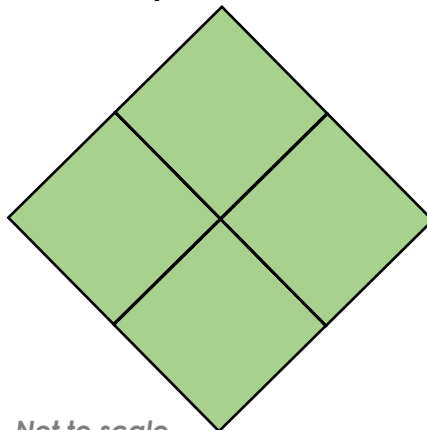


Not to scale

PS

Calculate Perimeter

1b. This shape has been made using identical squares. One square has a perimeter of 20cm. What is the perimeter of the whole shape?

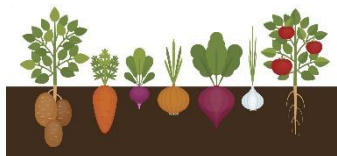


Not to scale

PS

2a. Mr Barnes needs to increase the size of his allotment. Currently the allotment is square shaped and has a perimeter of 12m. It needs to be turned into a rectangle with a perimeter of 20m.

What could the dimensions of his new allotment be?



PS

2b. The council need to increase the size of a local playground. Currently the playground is square shaped and has a perimeter of 16m. It needs to be turned into a rectangle with a perimeter of 24m.

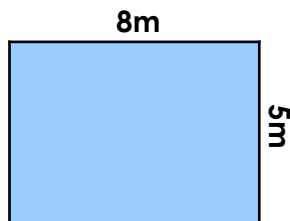
What could the dimensions of the new playground be?



PS

3a. Cherry is working out the perimeter of this shape.

The perimeter is 40m.



Is Cherry right? Explain your answer.

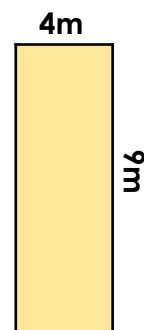


Not to scale

R

3b. Oliver is working out the perimeter of this shape.

The perimeter is 26m.



Is Oliver right? Explain your answer.

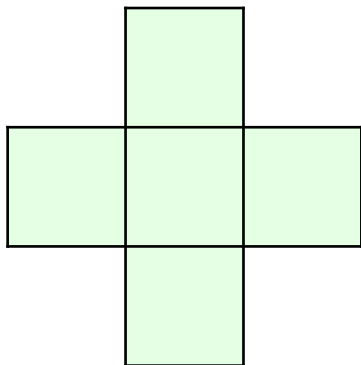


Not to scale

R

Calculate Perimeter

4a. This shape has been made using identical squares. One square has a perimeter of 32cm. What is the perimeter of the whole shape?

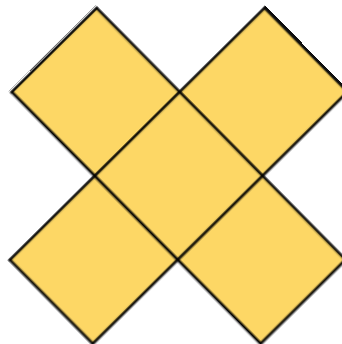


Not to scale

PS

Calculate Perimeter

4b. This shape has been made using identical squares. The middle square has a perimeter of 48cm. What is the perimeter of the whole shape?



Not to scale

PS

5a. A supermarket needs to increase the size of its trolley bay. Currently the trolley bay is square shaped and has a perimeter of 48m. It needs to be turned into a rectangle with a perimeter of 60m.

What could the dimensions of the new trolley bay be? Can you include a decimal?



PS

5b. A school needs to increase the size of the staff car park. Currently the car park is a rectangle with a perimeter of 30m. It needs to be a rectangle with a perimeter that is three times bigger.

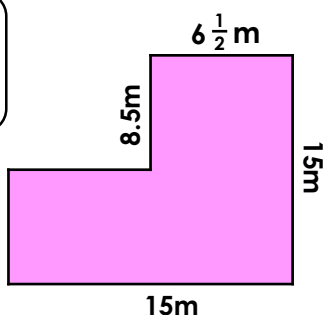
What could the dimensions of the new car park be? Can you include a decimal?



PS

6a. Lucy says,

The perimeter is 45m.



Is Lucy right? Explain your answer.

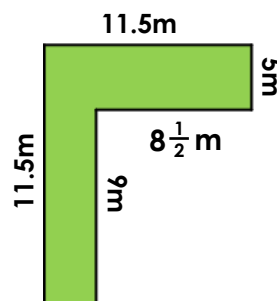


Not to scale

R

6b. Tahir says,

The perimeter is 45.5cm.



Is Tahir right? Explain your answer.

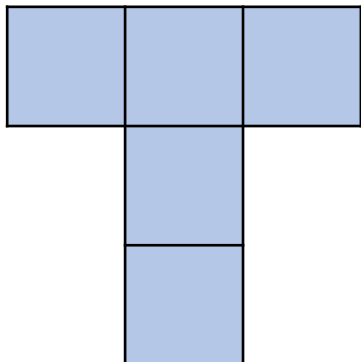


Not to scale

R

Calculate Perimeter

7a. This shape has been made using identical squares. One square has a perimeter of 82cm. What is the perimeter of the whole shape?

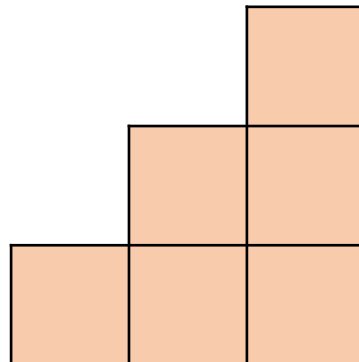


Not to scale

PS

Calculate Perimeter

7b. This shape has been made using identical squares. One square has a perimeter of 2cm. What is the perimeter of the whole shape?

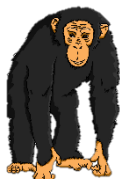


Not to scale

PS

8a. Chessup Zoo needs to increase the size of its Chimpanzee enclosure. Currently the enclosure is square shaped and has a perimeter of 200m. It needs to be turned into a rectangle with a perimeter of 600.5m.

Investigate the possible dimensions for the new enclosure. Can you include a fraction?



PS

8b. A shopping centre needs to increase the size of its eating area. Currently the eating area is square shaped and has a perimeter of 242m. It needs to be turned into a rectangle with a perimeter that is twice as big.

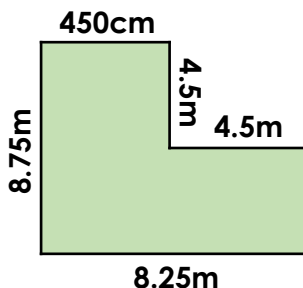
Investigate the possible dimensions for the new eating area. Can you include a fraction?



PS

9a. Colin says,

The perimeter is $34\frac{3}{4}$ m.



Is Colin right? Explain your answer.

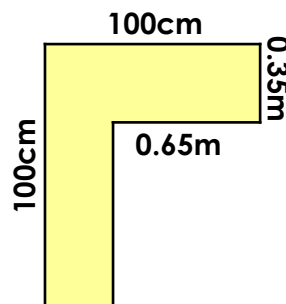


Not to scale

R

9b. Connie says,

The perimeter is 201m.



Is Connie right? Explain your answer.



Not to scale

R

Reasoning and Problem Solving Calculate Perimeter

Developing

1a. **24cm**

2a. **Various answers, for example:**

$$7m + 3m + 7m + 3m$$

3a. **No; the missing sides are 5m and 8m, so the perimeter is 26m.**

Expected

4a. **96cm**

5a. **Various answers, for example:**

$$12.5m + 17.5m + 12.5m + 17.5m$$

6a. **No; the missing sides are 6.5m and 8.5m, so the perimeter is 60m.**

Greater Depth

7a. **246cm**

8a. **Various answers, for example:**

$$200.25m + 100m + 200.25m + 100m$$

9a. **Yes; the missing side is 4.25m, so the perimeter is 34.75m.**

Reasoning and Problem Solving Calculate Perimeter

Developing

1b. **40cm**

2b. **Various answers, for example:**

$$8m + 4m + 8m + 4m$$

3b. **Yes; the missing sides are 4cm and 9m, so the perimeter is 26cm.**

Expected

4b. **144cm**

5b. **Various answers, for example:**

$$34.5m + 10.5m + 34.5m + 10.5m$$

6b. **No; the missing side is 3m, so the perimeter is 48.5m.**

Greater Depth

7b. **6cm**

8b. **Various answers, for example:**

$$141.5m + 100.5m + 141.5m + 100.5m$$

9b. **No; the missing sides are 0.65m and 0.35m, so the perimeter is 4m.**