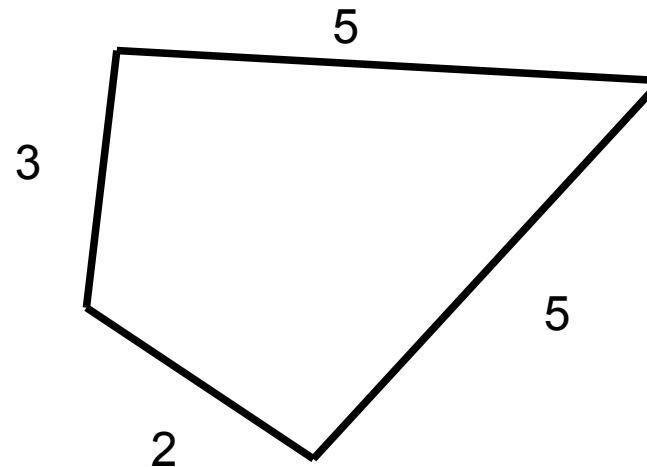
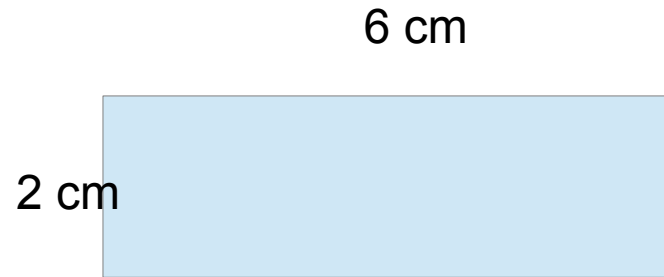
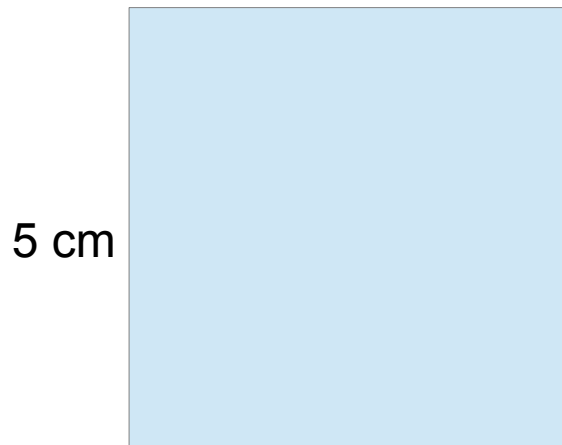


Perimeter

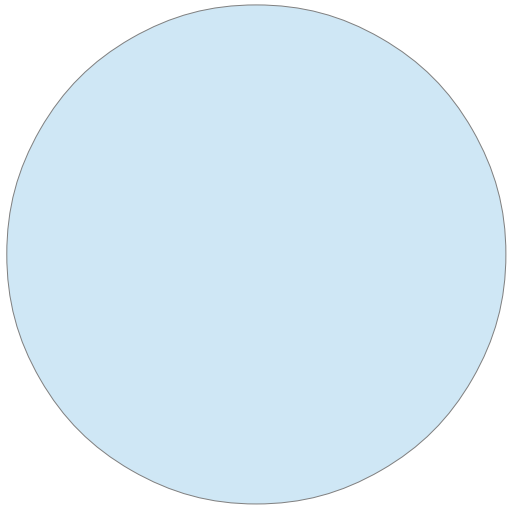
-- A measurement of the distance around an enclosed shape



To find the perimeter, we ADD up all of the sides

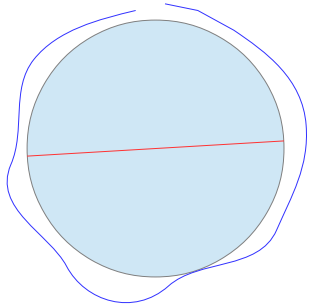
Perimeter

-- Circles! How many sides does a circle have?



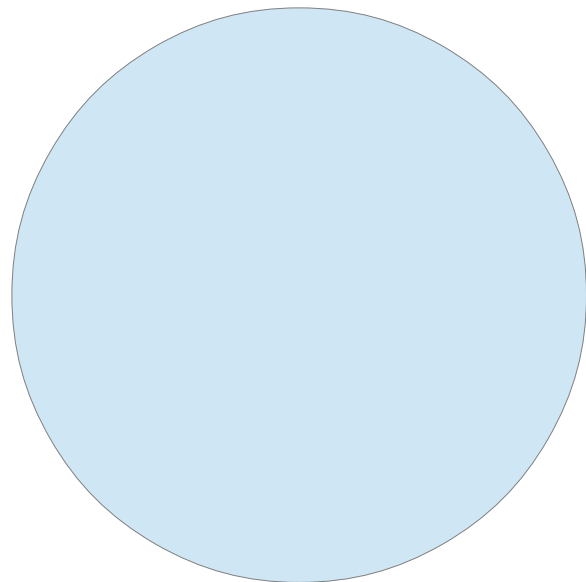
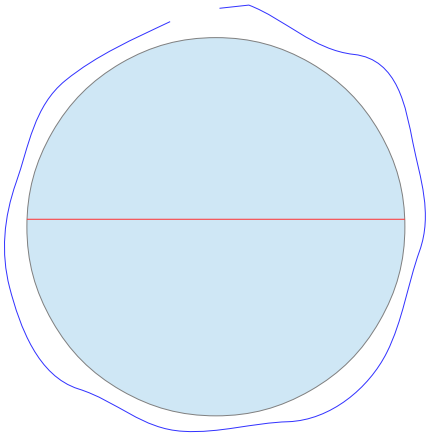
How do we find the perimeter of a circle?
It has ONE side

One way to measure the outside of the circle
Would be to take a string, wrap it around the curve
And then measure the length of the string



This person noticed that no matter the size of the circle...
The circumference always had the same relationship with
The diameter...

It was always slightly more than 3 times as long...



If this circle had a diameter of 5 cm, the circumference
Would be slightly more than 3 times that... 15 and a bit

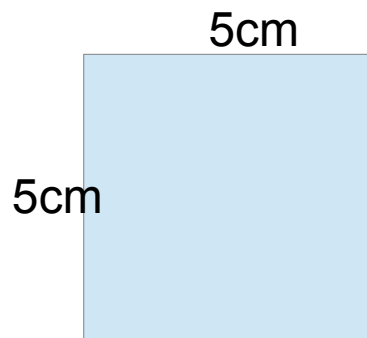
$$5 \times 3.141592654 \text{ or } 5 \times \text{PI} = \mathbf{15.7}$$

Area

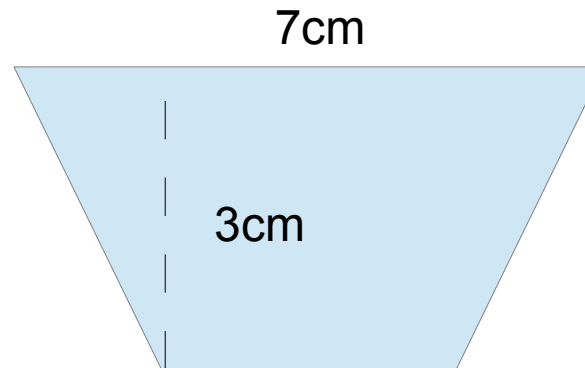
- A measurement of the space inside an Enclosed shape measure in SQUARE units
- Finding the area is really about counting the square units

(remember counting the tiles in the room)

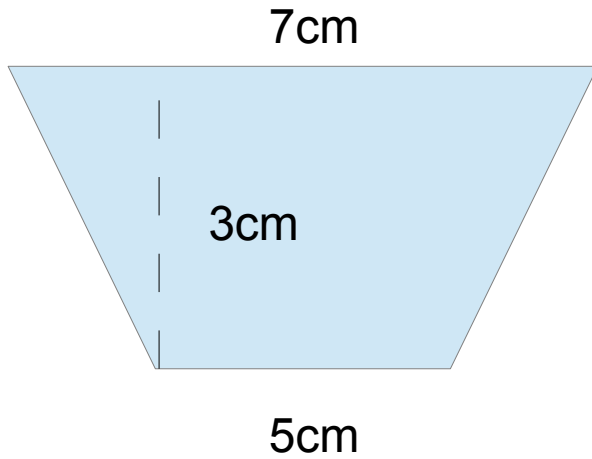
We didn't count all of them one by one,
We counted one row and then multiplied the
Number of rows we had



5 rows of 5... $5 \times 5 = 25\text{cm}^2$

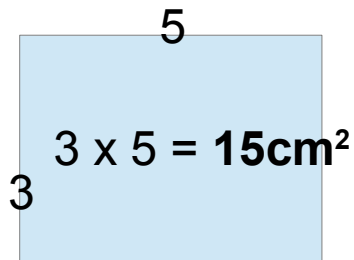
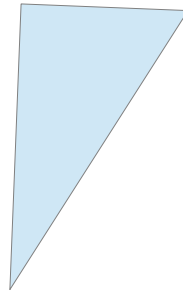
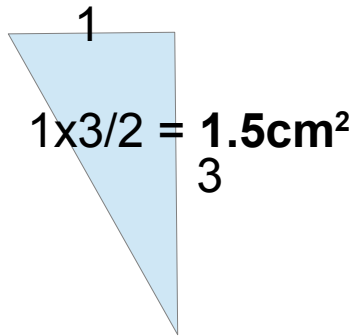


5cm



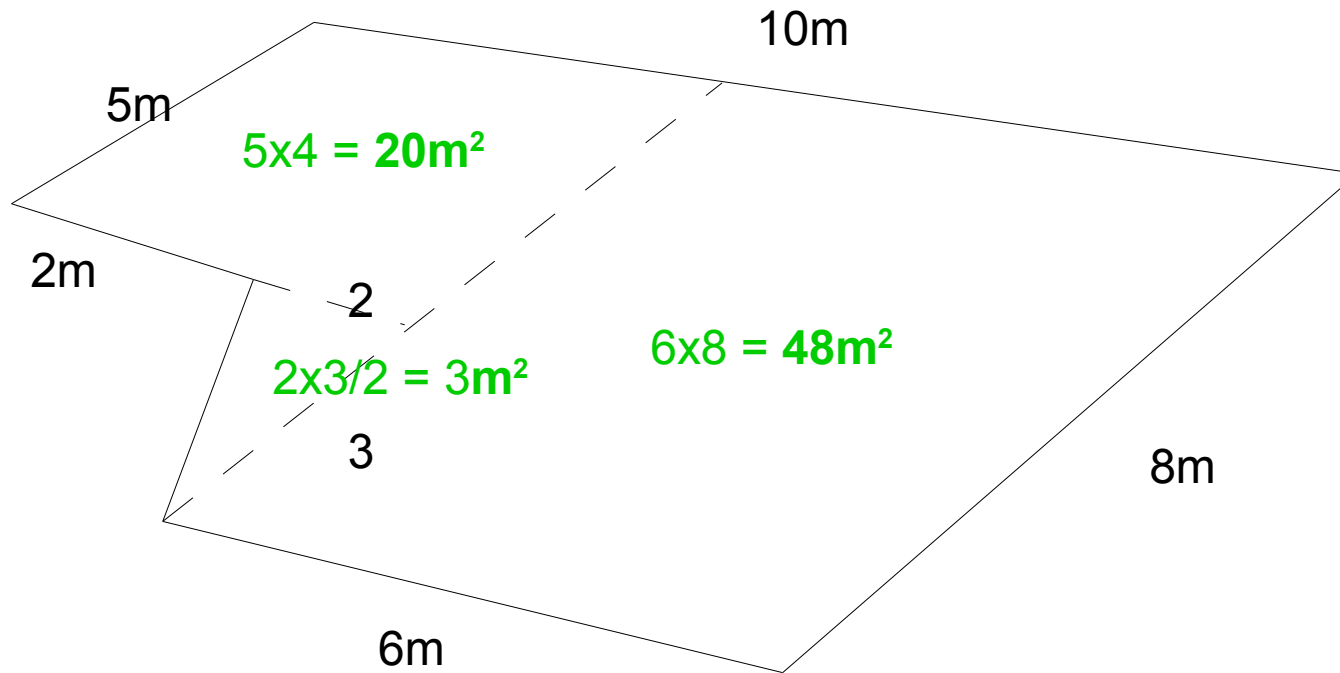
Total area:

$$1.5 + 1.5 + 15 = \mathbf{18 \text{ cm}^2}$$



Example: You want to resurface a driveway.

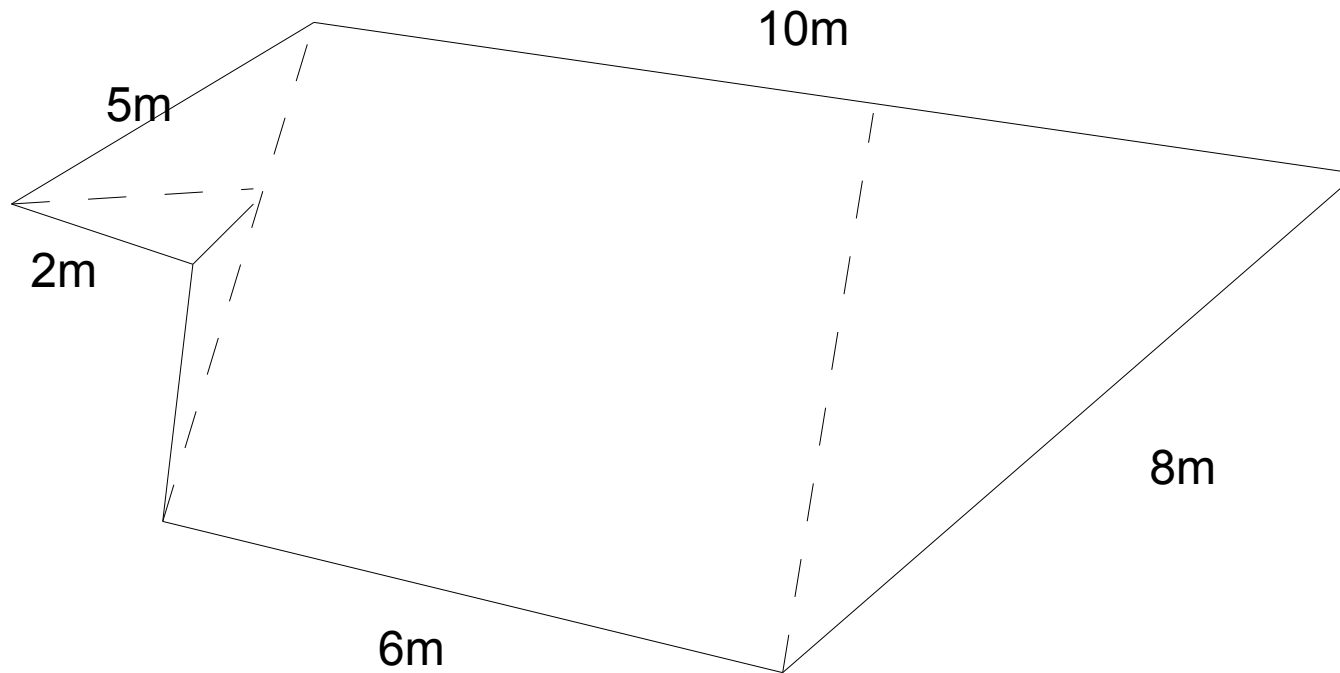
You need to determine the area.



$$\text{Total Area} = 20 + 48 + 3 = 71 \text{ m}^2$$

Example: You want to resurface a driveway.

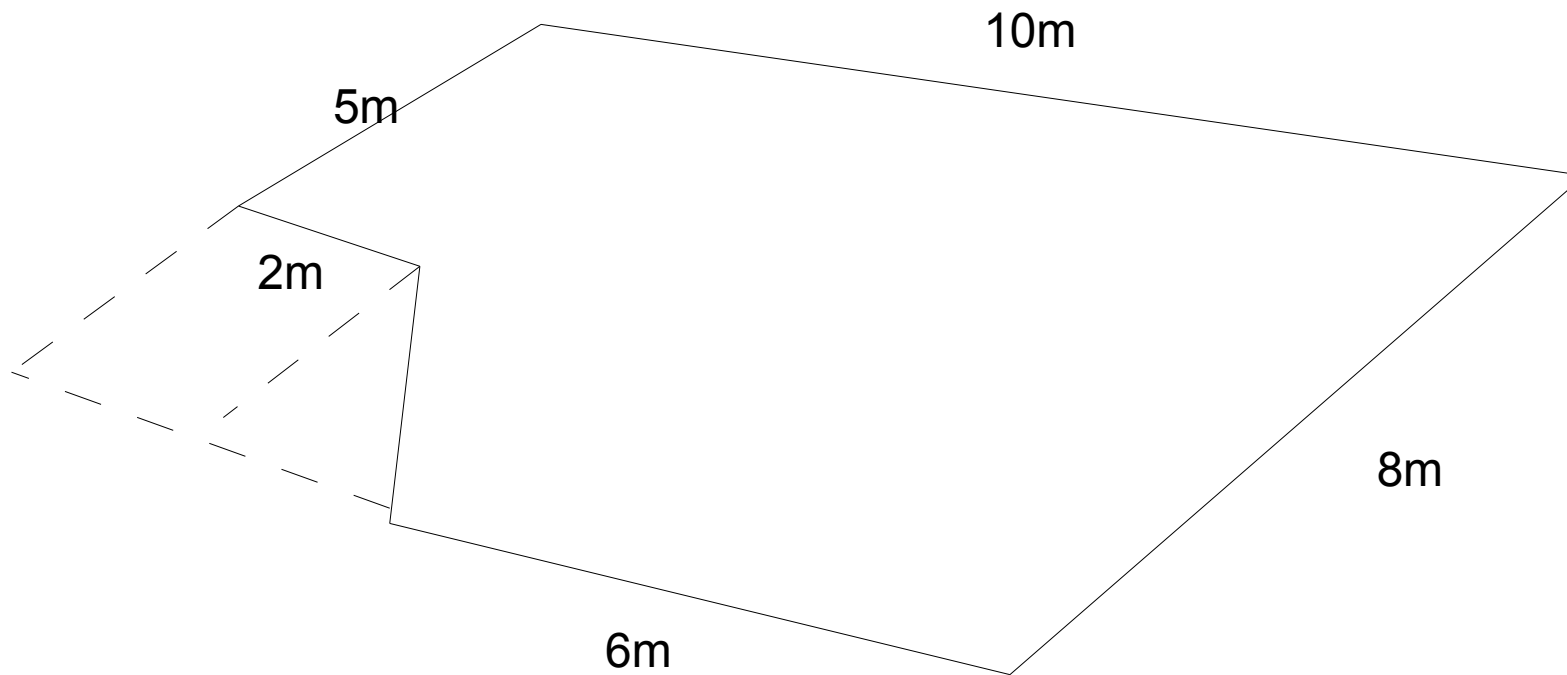
You need to determine the area.



When you cut up your shapes, do so in a way that makes it easy for you to calculate the area

Example: You want to resurface a driveway.

You need to determine the area.



Big rectangle: $8 \times 10 = 80\text{m}^2$

Subtract: 3×2 rectangle 6m^2

Subtract: 3×2 triangle 3m^2

Total area: $80 - 6 - 3 = 71\text{m}^2$