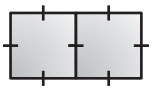
Here is what you need to remember from this topic on Area and perimeter

Area using unit squares

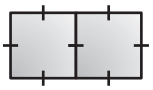
Area is just the amount of flat space a shape has inside its edges or boundaries.
A unit square is a square with each side exactly one unit of measurement long.
Count the total number of whole squares, or fractions of squares to calculate the area.



Area (A) $= 2$ units^2

Perimeter using unit squares

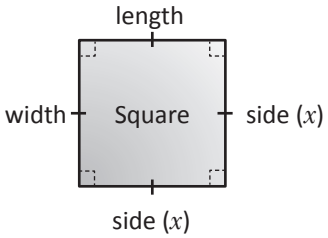
The perimeter with unit squares means count the number of edges around the outside of the shape.



Perimeter (P) $= 6$ units

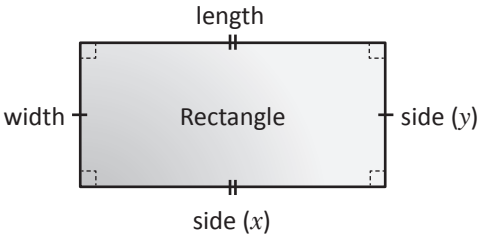
Area: Squares and rectangles

Just multiply the length of the perpendicular sides (length and width).



Area $=$ length $\times$ width

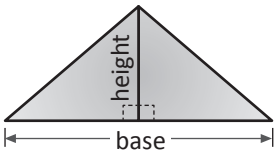
$= x^2$ units^2

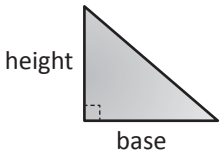


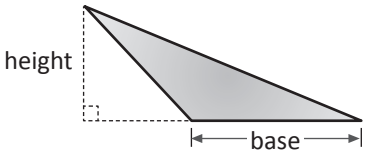
Area $=$ length $\times$ width

$= xy$ units^2

Area: Triangles



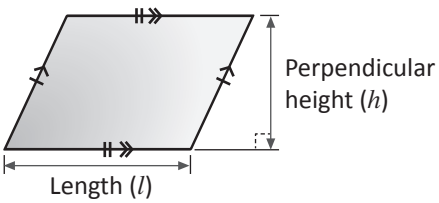




$\therefore$ Area of the triangle $=$ (half the base multiplied by the perpendicular height) units^2

$$= \frac{1}{2} \times b \times h \text{ units}^2$$

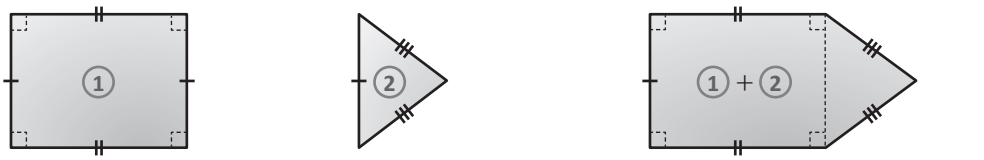
Area: Parallelograms



$\therefore$ Area of a parallelogram $=$ length $\times$ perpendicular height units^2

$= l \times h$ units^2

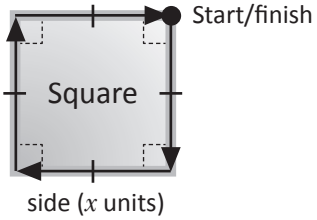
Area of composite shapes



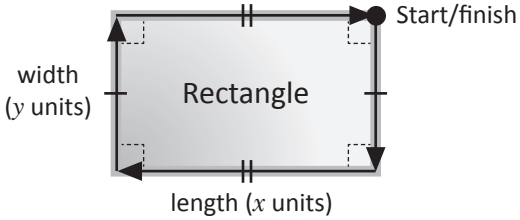
Area (1) (Rectangle) + Area (2) (Isosceles triangle) = Composite Area = Area (1) + Area (2) (Rectangle + Isosceles triangle)

Perimeter of simple shapes

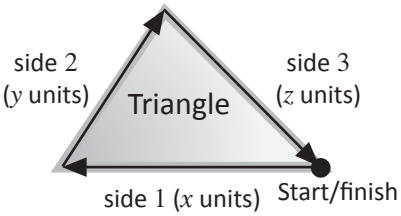
Add together the lengths of every side which make the shape.



$P = 4 \times$ side length
$= 4x$ units



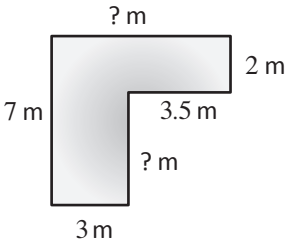
$P =$ width + length + width + length
$= 2x + 2y$ units

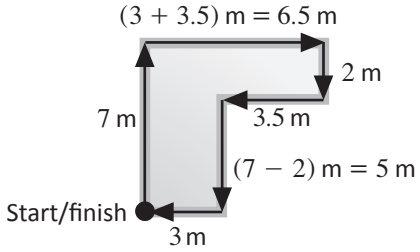


$P =$ side 1 + side 2 + side 3
$= x + y + z$ units

Perimeter of composite shapes

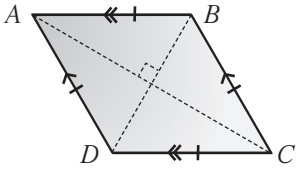
The lengths of all unlabelled sides must be found in composite shapes before calculating their perimeter. It is easier to add them together if the lengths are all in the same units.





$\therefore$ Perimeter $= 7\text{ m} + 6.5\text{ m} + 2\text{ m} + 3.5\text{ m} + 5\text{ m} + 3\text{ m}$
$= 27\text{ m}$

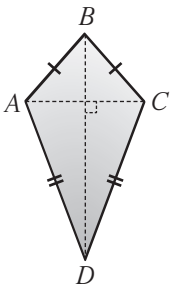
Rhombus, Kites and Trapeziums



Rhombus

Area $= (AC \times BD) \div 2$

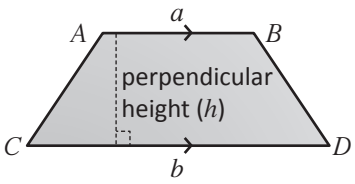
Perimeter $= 4 \times AB$

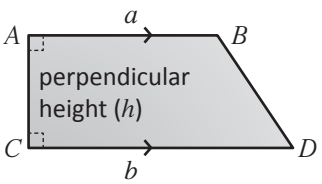


Kite

Area $= (AC \times BD) \div 2$

Perimeter $= 2 \times AB + 2 \times AD$





Trapezium

Area $= (a + b) \times h \div 2$

Perimeter $= AB + BD + CD + AC$