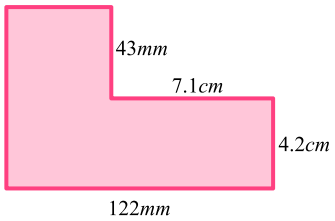
Geometry and Measure (Higher)

Area and perimeter

For the given shape, find:

a) Its perimeter

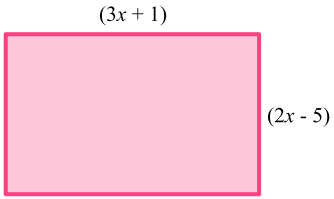
b) Its area



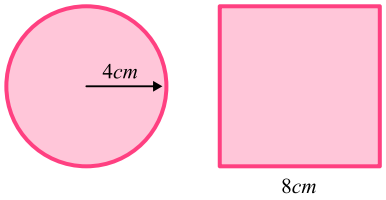
Given the rectangle below, give an expression for:

a) The perimeter in the form $mx + n$

b) The area in the form $ax^2 + bx + c$

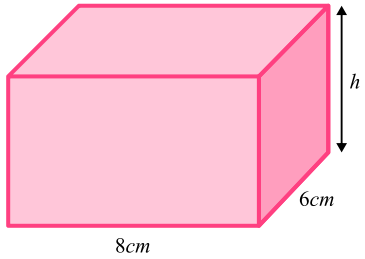


Giving your answer to one decimal place, find the difference in the area of a circle of radius $4cm$ and the area of a square of side length $8cm$.



Volume and surface area

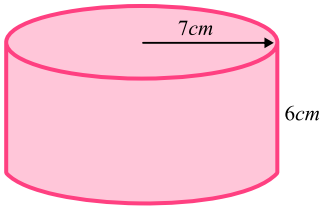
Given that this cuboid has a volume of $336cm^3$, find the value of h.



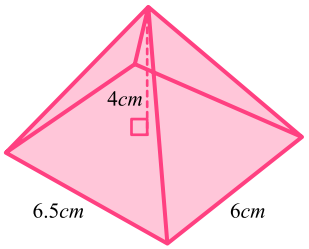
For the given cylinder, find:

a) The volume

b) The surface area

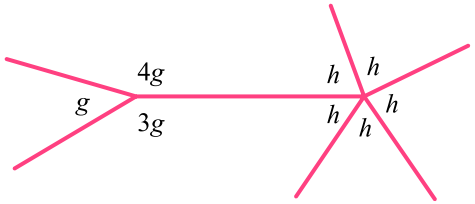


Use the formula $V = \frac{1}{3}bh$ where b is the base area and h is the perpendicular height from base to apex, to calculate the volume of this pyramid.



Angles at a point

Using the diagram shown, evaluate h - g.



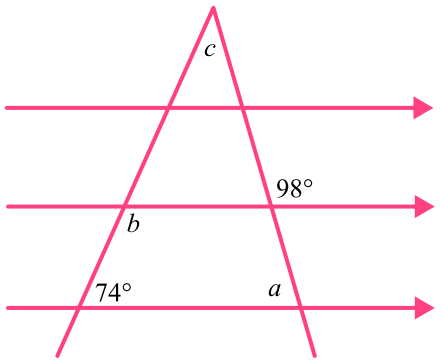
Angles in parallel lines

Determine the size of each labelled angle:

a :

b :

c :



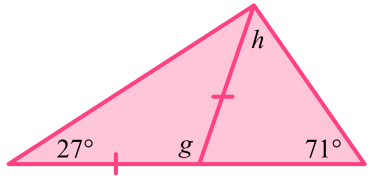
Interior and exterior angles

Find the difference between the interior angle and exterior angle of an icosahedron.

Angles in triangles

Find the size of angle g.

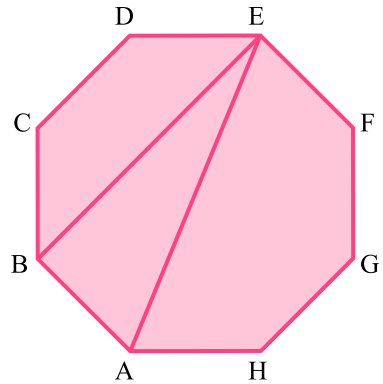
Find the size of angle h.



Angles in polygons

ABCDEFGH is a regular octagon.

Determine the size of angle $\widehat{BEA}$.



Polygon properties

A particular regular n-gon has an exterior angle x satisfying $50° < x < 60°$.

State the name of this n-gon and find the size of one interior angle accurate to two decimal places.