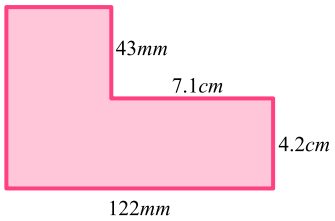
Geometry and Measure (Higher)

Area and perimeter

For the given shape, find:

a) Its perimeter $= 414mm$ or $41.4cm$

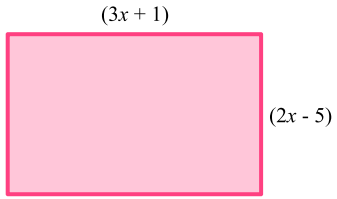
b) Its area $= 7317mm^2$ or $73.17cm^2$



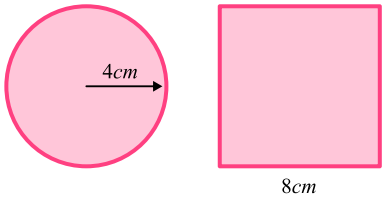
Given the rectangle below, give an expression for:

a) The perimeter in the form $mx + n$
$= 10x - 8$

b) The area in the form $ax^2 + bx + c$
$= 6x^2 - 13x - 5$



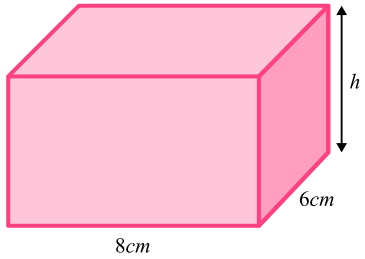
Giving your answer to one decimal place, find the difference in the area of a circle of radius $4cm$ and the area of a square of side length $8cm$.



$= 13.7cm^2$

Volume and surface area

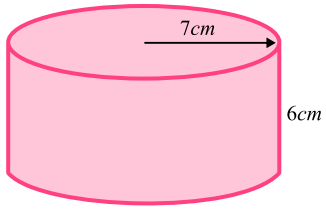
Given that this cuboid has a volume of $336cm^3$, find the value of h. $= 7cm$



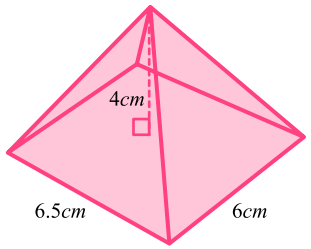
For the given cylinder, find:

a) The volume $= 923.6cm^3$

b) The surface area $= 571.8cm^2$



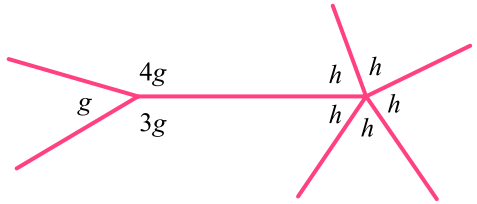
Use the formula $V = \frac{1}{3}bh$ where b is the base area and h is the perpendicular height from base to apex, to calculate the volume of this pyramid.



$= 52cm^3$

Angles at a point

Using the diagram shown, evaluate h - g.
$= 27°$



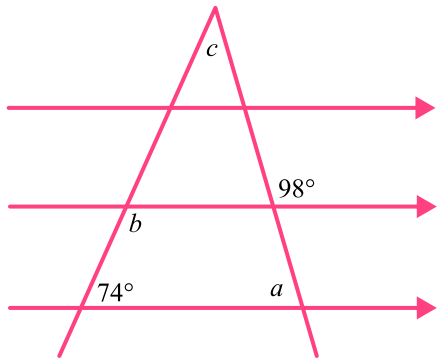
Angles in parallel lines

Determine the size of each labelled angle:

a : $82°$

b : $106°$

c : $24°$



Interior and exterior angles

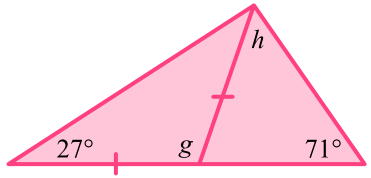
Find the difference between the interior angle and exterior angle of an icosahedron.

$= 144°$

Angles in triangles

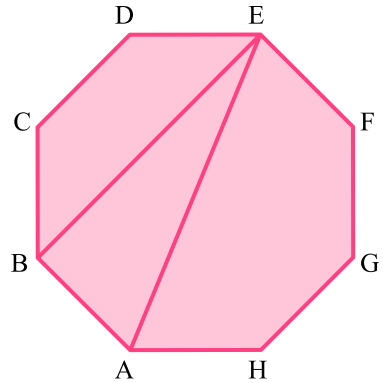
Find the size of angle g. $= 126°$

Find the size of angle h. $= 55°$



Angles in polygons

ABCDEFGH is a regular octagon.
Determine the size of angle $\widehat{BEA}$.
$= 22.5°$



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.

$= 7$-gon, heptagon, interior angle $128.57°$

THIRD SPACE LEARNING