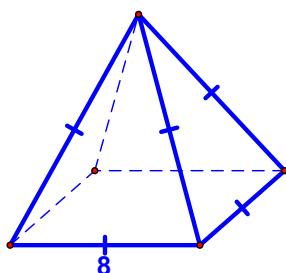




Surface Area of Pyramids - Lesson 12-2

Warmup!

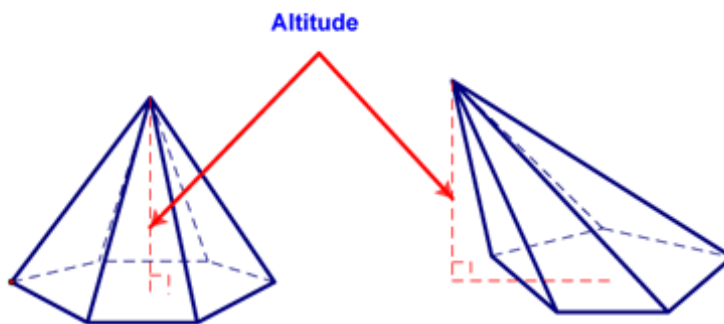
A pyramid has a square base and equilateral triangles as faces. If the edges are each 8 cm long, find the total surface area of the pyramid.



Today, we're going to look at how to find the *surface area of pyramids*. Let's start by defining this type of polyhedron:

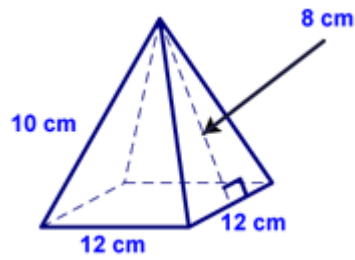
A pyramid is a polyhedron with one polygonal face (called a *base*) and whose other faces (called the *lateral faces*) are triangles formed by segments connecting the corresponding vertices of the base to a common point (called the *vertex*).

e.g.,



The *altitude* of a pyramid is the perpendicular segment from the vertex to the plane of the base. The *height* is the length of the altitude.

Now, we can look at finding the *total surface area* in the following two examples:



Find the total surface area of the rectangular right pyramid (measurements in cm):

