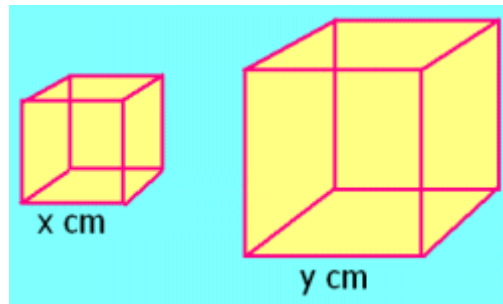


Risp 7: The Two Special Cubes

You are presented with two cubes, one of side x cm, the other of side y cm, with $x < y$.



V is the total volume of the two cubes.

S is the total surface area of the two cubes.

E is the total edge-length of the two cubes.

You are given that E , S and V (taken in some order) are in arithmetic progression.

What is the maximum possible value for y ?

If y takes this value, then what is x ?

A possibly helpful note:

a , b , and c are in arithmetic progression $\Leftrightarrow a + c = 2b$