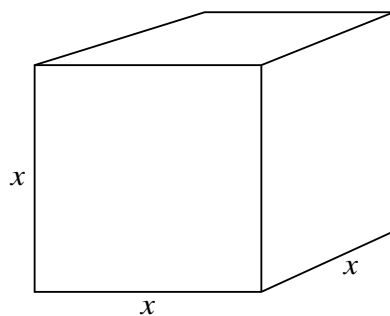


3



The diagram shows a cubical closed container made of a thin elastic material which is filled with water and frozen. During the freezing process the length,  $x$  cm, of each edge of the container increases at the constant rate of 0.01 cm per minute. The volume of the container at time  $t$  minutes is  $V$  cm<sup>3</sup>.

Find the rate of increase of  $V$  when  $x = 20$ .

[3]

[illegible]