

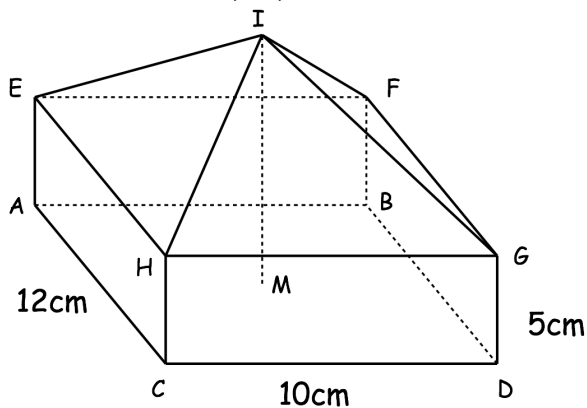


The number of season tickets that an ice hockey team sells in a season is  $P_n$

The number of season tickets sold in the next season is  $P_{n+1} = 1.8P_n - 100$

200 season tickets were sold in the first season. How many season tickets were sold in the third season?

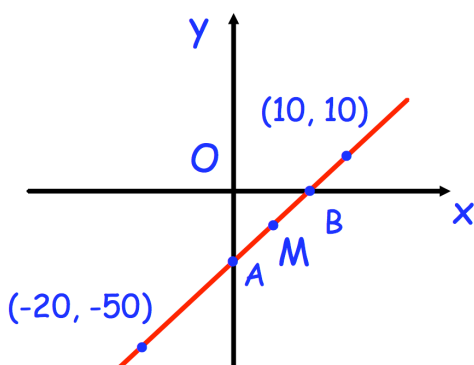
Hannah created a glass paperweight. The apex of the pyramid, I, is directly above the centre, M, of ABDC.



The density of the glass is  $2.6\text{g/cm}^3$   
The mass of the paperweight is  $1705.6\text{g}$

Find the height of the paperweight, IM.

The line below passes through the point  $(-20, -50)$  and  $(10, 10)$



The line meets the y-axis at the point A and the x-axis at the point B.

M is the midpoint of A and B.

Find the coordinates of the point M.