c) $\text{Area}_{HCC'} = \frac{\text{Base} \times \text{height}}{2} = \frac{CH \times HC}{2} = \frac{2\sqrt{3}}{3}$ units of area.

part-B: 1) Area of shaded domain $= \text{Area}_{ABCD} - \text{Area}_{MBPN}$.

$= AB^2 - MB^2$

$= (x-6)^2 - 1^2$ cm^2

2) Area $= 3$

So, $(x-6)^2 - 1 = 3$

$(x-6)^2 - 4 = 0$

then, $(x-6-2)(x-6+2) = 0$

$(x-8)(x-4) = 0$

means $x = 8$ accepted $x > 6$

or $x = 4$ rejected $x < 6$.

part-C: 1) $C(x; 3)$

$x = \sqrt{(s+w)^2} + s + w$ but $s + w < 0$

$= -(s+w) + s + w$

$x = 0$

So, $C(0, 3)$

Thus, pt C is on x-axis since its abscissa is 0.

2a) placed ✓.

2b) In $\triangle ABC$ we have:

$C(0, 3)$, $A(2, 3)$ & $B(2, -3)$

$x_A = x_B = 2$

So, $(AB) \parallel y$-axis.

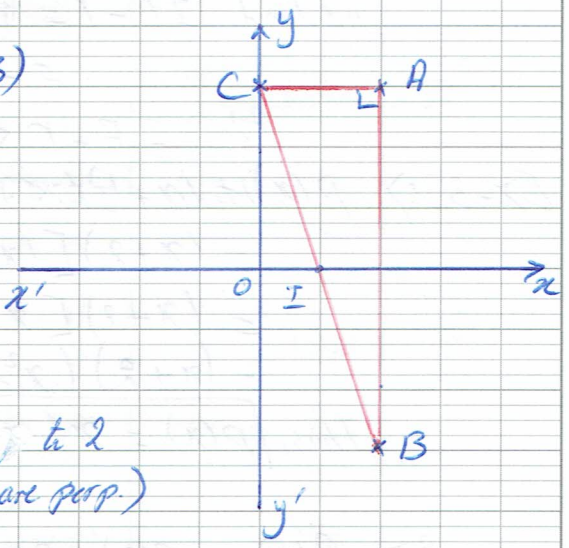
& $y_A = y_C = 3$

So, $(AC) \parallel x$-axis

but system is orthonormal

hence, $(AB) \perp (AC)$ (2 lines $\perp$ to 2 perp lines are perp.)

Thus, $\triangle ABC$ is right at A.



c) $\triangle ABC$ is right at A (proved)

So, I, the center of the circle circumscribed about $\triangle ABC$,