

$$\text{So } X_{EA} = X_{BH} \quad \& \quad Y_{EA} = Y_{BH}$$

$$X_H = 2 \quad Y_H = 7$$

$$H(2, 7)$$

c) H is the translate of B by translation of vector \vec{EA}
 because $\vec{AH} = \vec{EB}$. (W)

5th exercise:

Wall is perpendicular to ground.
 then, $\triangle ABC$ is right at B.

$$\text{So, } \sin \hat{ACB} = \frac{\text{OPP}}{\text{hyp}} = \frac{AB}{AC}$$

$$= \frac{3.05}{3.2} = 0.95$$

$$\text{hence, } \hat{ACB} = \sin^{-1}(0.95)$$

$$= 72.38\dots$$

$$\approx 72 \text{ (rounded to nearest degree)}$$

2) Since I is midpt of AC
 then I is equidistant from pts
 A, C & B (median relative to a hyp of a right \triangle)
 but B is fixed
 & AC = cst (length of ladder will not alter)
 then $BI = \frac{AC}{2} = \frac{3.2}{2} = 1.6\text{m} = \underline{\underline{cst}}$. (Y)

which means the distance between a fixed pt B.