



$CK=KB, AH=17\text{ cm}, HB=9\text{ cm}$

$HK=?$

$$AB=AH+HB = 17+9=26\text{ cm}$$

$\angle KHB = \angle ACB$; $\angle B$ - общий
 $\Rightarrow \triangle KHB \sim \triangle ACB$ (по двум углам)

$$\Rightarrow AB/KB = CB/HB$$

$$26/KB = 2 \cdot KB/9$$

$$\Rightarrow 13/KB = KB/9 \Rightarrow KB^2 = 13 \cdot 9 = 117$$

$\triangle KHB$: По теореме Пифагора: $HK^2 = KB^2 - HB^2$

$$HK^2 = 117 - 9^2 = 117 - 81 = 36$$

$$\Rightarrow HK = 6\text{ cm}$$