

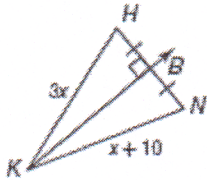
Name: Key

Date: _____

Station 4

Find the measure asked for in each problem.

1. KN



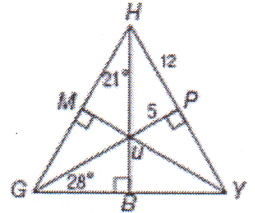
$$\begin{aligned} KH &= KN \\ 3x &= x+10 \\ 2x &= 10 \\ x &= 5 \end{aligned}$$

$$\begin{aligned} KN &= 5+10 \\ \boxed{KN} &= \boxed{15} \end{aligned}$$

2. Point U is the incenter of $\triangle GHY$.

Find HU

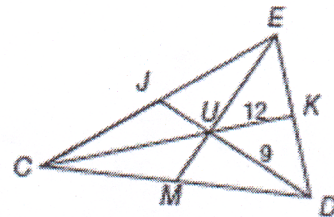
$$\begin{aligned} 5^2 + 12^2 &= HU^2 \\ 25 + 144 &= HU^2 \\ \sqrt{169} &= \sqrt{HU^2} \\ \boxed{13} &= \boxed{HU} \end{aligned}$$



3. In $\triangle CDE$, U is the centroid, $UK = 12$, $EM = 21$, and $UD = 9$. Find each measure.

Find CU

$$\begin{aligned} CU &= 12(2) \\ \boxed{CU} &= \boxed{24} \end{aligned}$$



CCSS ARGUMENTS Use the given information to determine whether \overline{LM} is a perpendicular bisector, median, and/or an altitude of $\triangle JKL$.

4. $\overline{LM} \perp \overline{JK}$ Altitude

5. $\overline{JM} \cong \overline{KM}$ Median

6. $\overline{LM} \perp \overline{JK}$ and $\overline{JL} \cong \overline{KL}$

perpendicular bisector
Altitude
Median

