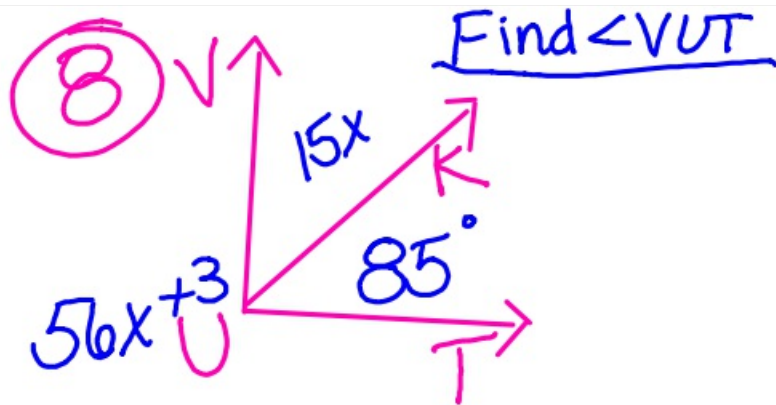




$$\angle VUT = \angle VUK + \angle KUT$$

$$56x + 3 = 15x + 85$$

$$\begin{array}{r} 56x + 3 \\ -15x \\ \hline \end{array}$$

$$41x + 3 = 85$$

$$\begin{array}{r} 41x + 3 \\ -3 \\ \hline \end{array}$$

$$41x = 82$$

$$\begin{array}{r} 41x \\ \hline 41 \end{array}$$

$$x = 2$$

$$\begin{aligned} \angle VUT &= 56x + 3 \\ &= 56(2) + 3 \\ &= 112 + 3 \end{aligned}$$

$$\boxed{\angle VUT = 115}$$

AAP

Substitution

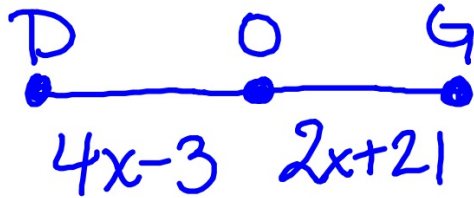
Subtraction

Subtraction

Division

Substitution

④ $DG = 60 \text{ ft}$



$DO + OG = DG$ | SAP

$\underline{4x-3} + \underline{2x+21} = 60$ | Subst

$6x + \cancel{18} = 60$
 $\quad \quad \quad \cancel{-18} \quad \quad \quad \cancel{-18}$

CLT
Subst.

$\frac{6x}{6} = \frac{42}{6}$

Divi.

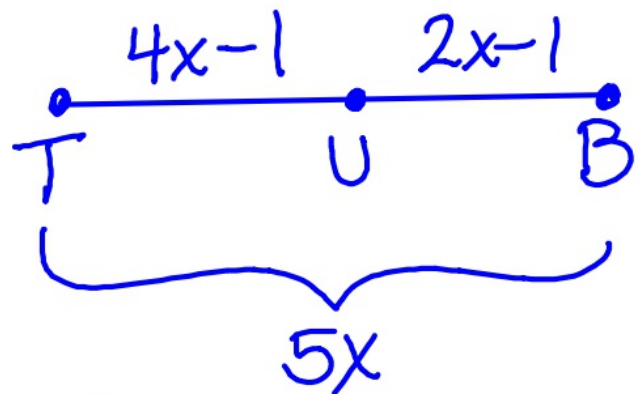
$x = 7$

$x = 7$

$DO = 4(7) - 3$
 $\quad \quad = 25$

$OG = 2(7) + 21$
 $\quad \quad = 35$

⑥ $TU = 4x - 1$
 $UB = 2x - 1$
 $TB = 5x$



$$TU + UB = TB$$

$$\underline{4x-1} + \underline{2x-1} = 5x$$

$$\cancel{6x} - 2 = 5x$$

$$\cancel{-6x}$$

$$\cancel{-6x}$$

$$\frac{-2}{-1} = \frac{-1x}{-1}$$

$$2 = x$$

$$TU = 4(2) - 1 = 7$$

$$UB = 2(2) - 1 = 3$$

$$TB = 5(2) = 10$$

SAP

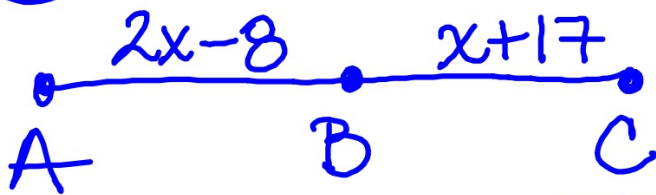
Substitute

CLT

Subtraction

Division

③ $AC = 39m$



$$\overline{AB} + \overline{BC} = \overline{AC}$$

$$x = 10$$

$$AB = \frac{2(10) - 8}{12}$$

$$BC = \frac{10 + 17}{27}$$

$$\underline{2x-8} + \underline{x+17} = 39$$

$$3x + 9 = 39$$

$$\frac{3x}{3} = \frac{30}{3}$$

$$x = 10$$

SAP

Subst.

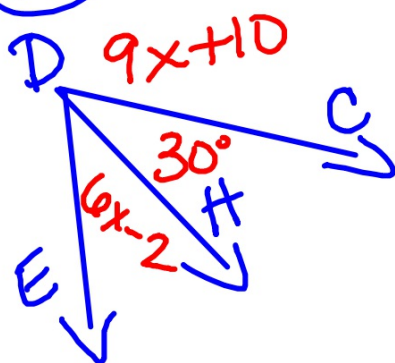
CLT

Subtr.

Division

10

Find $m\angle HDE$



$$\angle CDE = \angle CDH + \angle HDE$$

$$9x+10 = 30 + 6x-2$$

$$9x = 20 + 6x - 2$$

$$\angle HDE = 6(6) - 2$$

$$\angle HDE = 34$$

$$9x = 18 + 6x$$

$$\frac{3x}{3} = \frac{18}{3}$$

$$x = 6$$

AP
Sub
Sub
CL
Sub
Div