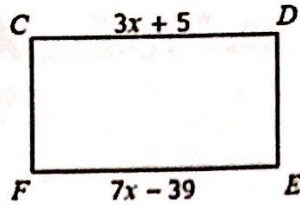


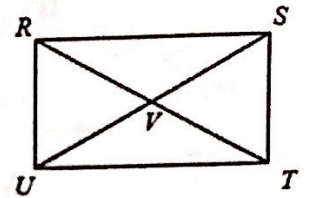
6. Find EF.



$$\begin{aligned}
 3x + 5 &= 7x - 39 \\
 -3x &\quad -3x \\
 \hline
 5 &= 4x - 39 \\
 +39 &\quad +39 \\
 \hline
 44 &= 4x \\
 11 &= x
 \end{aligned}$$

$$\begin{aligned}
 7(11) - 39 \\
 77 - 39 \\
 \hline
 \boxed{38}
 \end{aligned}$$

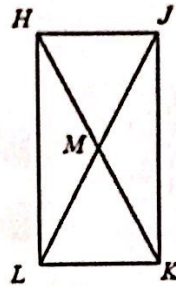
7. If $RT = 5x - 14$ and $US = 2x + 10$, find VT.



$$\begin{aligned}
 5x - 14 &= 2x + 10 \\
 3x &= 24 \\
 x &= 6
 \end{aligned}$$

$$\begin{aligned}
 RS &= 5(6) - 14 \\
 &= 16 \\
 VT &= 16/2 = \boxed{8}
 \end{aligned}$$

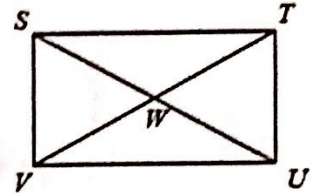
8. If $JM = x + 17$ and $MK = 5x - 23$, find JL.



$$\begin{aligned}
 x + 17 &= 5x - 23 \\
 -x &\quad -x \\
 \hline
 17 &= 4x - 23 \\
 +23 &\quad +23 \\
 \hline
 40 &= 4x \\
 10 &= x \\
 JM &= 10 + 17 = 27
 \end{aligned}$$

$$JL = 2(27) = \boxed{54}$$

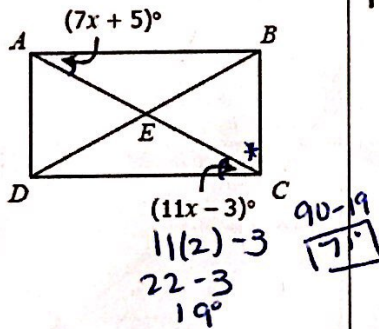
9. If $VW = 9x - 11$ and $SU = 16x - 12$, find WT.



$$\begin{aligned}
 2(9x - 11) &= 16x - 12 \\
 18x - 22 &= 16x - 12 \\
 -16x &\quad -16x \\
 \hline
 2x - 22 &= -12 \\
 +22 &\quad +22 \\
 \hline
 2x &= 10 \\
 x &= 5
 \end{aligned}$$

$$\begin{aligned}
 VW &= 9(5) - 11 \\
 &= 45 - 11 \\
 &= \boxed{34}
 \end{aligned}$$

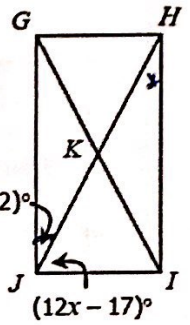
10. Find $m\angle BCE$.



$$\begin{aligned}
 7x + 5 &= 11x - 3 \\
 -7x &\quad -7x \\
 \hline
 5 &= 4x - 3 \\
 +3 &\quad +3 \\
 \hline
 8 &= 4x \\
 2 &= x
 \end{aligned}$$

$$\begin{aligned}
 11(2) - 3 \\
 22 - 3 \\
 \hline
 19^\circ
 \end{aligned}$$

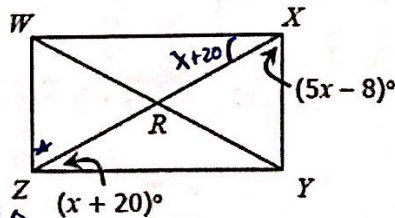
11. Find $m\angle JHI$.



$$\begin{aligned}
 3x + 2 + 12x - 17 &= 90 \\
 15x - 15 &= 90 \\
 +15 &\quad +15 \\
 \hline
 15x &= 105 \\
 15 &\quad 15 \\
 \hline
 x &= 7
 \end{aligned}$$

$$\begin{aligned}
 3(7) + 2 \\
 21 + 2 &= \boxed{23}
 \end{aligned}$$

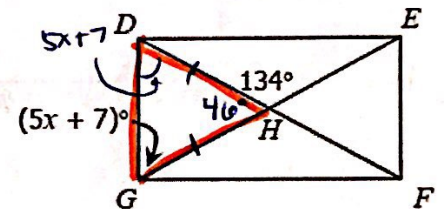
12. Find $m\angle XZW$.



$$\begin{aligned}
 x + 20 + 5x - 8 &= 90 \\
 6x + 12 &= 90 \\
 -12 &\quad -12 \\
 \hline
 6x &= 78 \\
 6 &\quad 6 \\
 \hline
 x &= 13
 \end{aligned}$$

$$\begin{aligned}
 5(13) - 8 \\
 65 - 8 \\
 \hline
 \boxed{57}
 \end{aligned}$$

13. Solve for x.



$$\begin{aligned}
 5x + 7 + 5x + 7 + 46 &= 180 \\
 10x + 60 &= 180 \\
 -60 &\quad -60 \\
 \hline
 10x &= 120
 \end{aligned}$$

$$\boxed{x = 12}$$