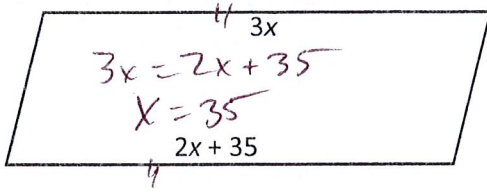


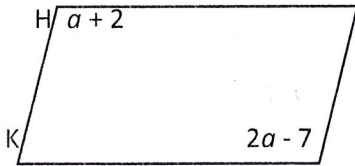


8. Find  $x$  in the parallelogram.



$x = \underline{35}$

9. Find  $a$  in the parallelogram, then find the measures of  $\angle H$  and  $\angle K$

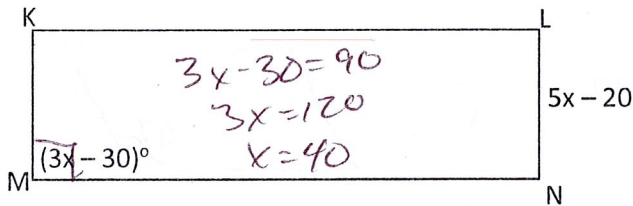


$a+2 = 2a-7$   
 $9 = a$

$\angle H = (9) + 2$   
 $= 11^\circ$

$\angle K = 180 - 11$   
 $= 169^\circ$

10. KLMN is a rectangle.



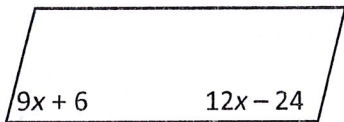
$x = \underline{40}$

$LN = \frac{5(40) - 20}{1} = 180$

11. What is true about the diagonals of a rectangle?

Diagonals of a rectangle are  $\cong$  & they bisect each other

12. Find  $x$  in the parallelogram.



$9x+6 + 12x-24 = 180$

$21x - 18 = 180$

$21x = 198$

$x \approx 9.43$

13. Given that B, D, & F are midpoints, use the diagram at right to find the following lengths.

$AB = 6$

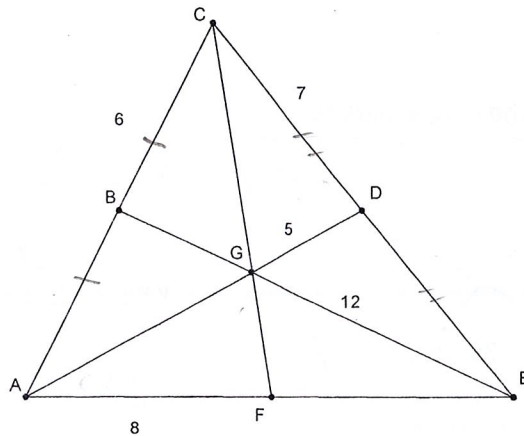
$CE = 14$

$BG = \frac{1}{2}(12) = 6$

$AG = 2(5) = 10$

$AD = 3(5) = 15$

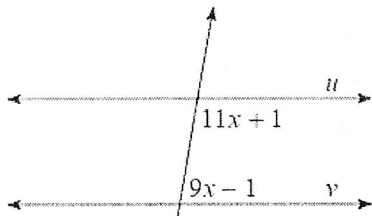
Perimeter of  $\triangle ACE = 2(6+7+8)$   
 $= 42$





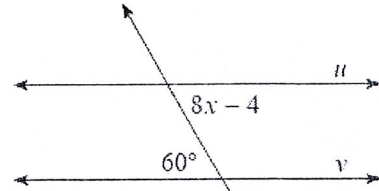
Find the value of  $x$  that makes lines  $u$  and  $v$  parallel.

28)



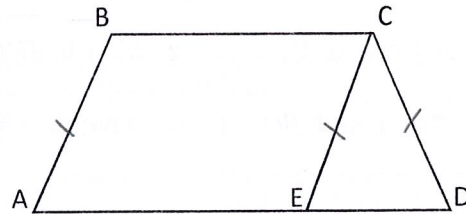
If  $u \parallel v$ , then  $\rightarrow 11x + 1 + 9x - 1 = 180$   
 $20x = 180$   
 $x = 9$

29)



If  $v \parallel u$ , then  
 $8x - 4 = 60$   
 $8x = 64$   
 $x = 8$

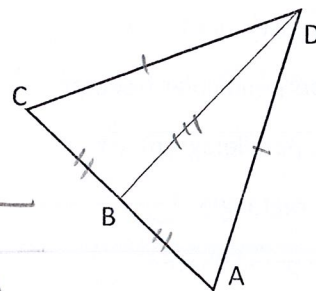
30. Given: ABCD is an isosceles trapezoid  
 ABCE is a parallelogram



Prove:  $\angle CED \cong \angle D$

- |  |   |
|--|---|
| ① ABCD Isos Trap<br>ABCE Pgram<br>② $\overline{AB} \cong \overline{CE}$<br>③ $\overline{BC} \cong \overline{ED}$<br>④ $\overline{CE} \cong \overline{ED}$<br>⑤ $\triangle CED \cong \triangle D$ | ① given<br>② Def Isos Trap.<br>③ opp sides $\cong$<br>④ Subst.<br>⑤ $\triangle \Rightarrow \triangle$ |
|--|---|

31. Given:  $\triangle ADC$  is isosceles with base AC  
 $\overline{DB}$  is a median



Prove:  $\overline{DB}$  is an  $\angle$  bisector

- |   |   |
|---|---|
| ① $\triangle ADC$ Isos / $\overline{DB}$ is med.<br>② $\overline{DC} \cong \overline{AD}$<br>③ B midpt $\overline{AC}$<br>④ $\overline{BC} \cong \overline{AB}$<br>⑤ $\overline{BD} \cong \overline{BD}$<br>⑥ $\triangle CBD \cong \triangle ABD$<br>⑦ $\angle CDB \cong \angle ADB$<br>⑧ $\overline{DB}$ is an $\angle$ bis. | ① given<br>② Def Isos $\triangle$<br>③ Def median<br>④ Def midpt<br>⑤ Reflex<br>⑥ SSS (2, 4, 5)<br>⑦ CPCTC<br>⑧ Def $\angle$ Bis. |
|---|---|