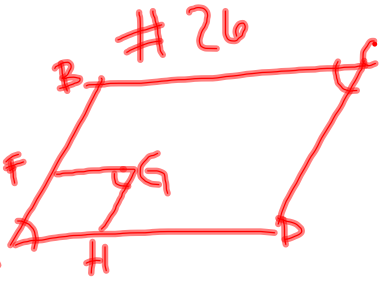
#26

Statement	Reasons
1. ABCD and AFGH are parallelograms	1. given
2. $\angle A \cong \angle C$	2. opp. $\angle$'s of $\square$ are $\cong$
3. $\angle A \cong \angle G$	3. opp. $\angle$'s of $\square$ are $\cong$
4. $\angle C \cong \angle G$	5. Transitive $\cong$

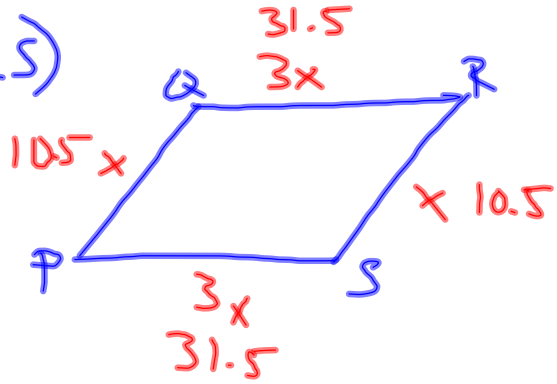


28. $QR = 3(RS)$

$3x + 3x + x + x = 84$

$\frac{8x}{8} = \frac{84}{8}$

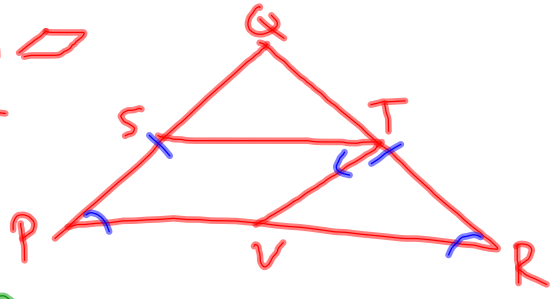
$x = 10.5$



14. Given: PSTV is a $\square$

$\overline{QP} \cong \overline{QR}$

Prove: $\angle STV \cong \angle R$



Statement	Reason
1. PSTV is a $\square$	1. Given
2. $\angle STV \cong \angle P$	2. opp. $\angle$s of $\square$ are $\cong$
3. $\overline{QP} \cong \overline{QR}$	3. Given
4. $\angle P \cong \angle R$	4. Iso. $\triangle$ thm
5. $\angle STV \cong \angle R$	5. Tran. prop of $\cong$

0-5+

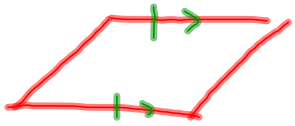
6-10✓

11+-

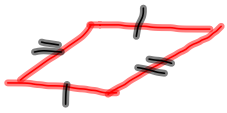
6.3 Conditions for parallelograms

Theorems

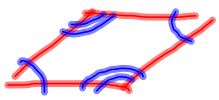
6-3-1: if a quad has one pair of opp. sides that are ∥ & ≅, then its a ▱.

Ex: 

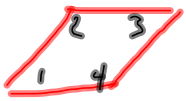
6-3-2: if a quad. has 2 pairs of ≅ opp. sides, Then its a ▱.

Ex: 

6-3-3: if a quad. has 2 pairs of ≅ opp ∠'s, then its a ▱.

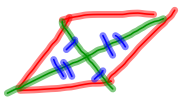
Ex: 

6-3-4: if a quad. has an ∠ supplementary to both consecutive interior ∠'s, then its a ▱.

Ex: 

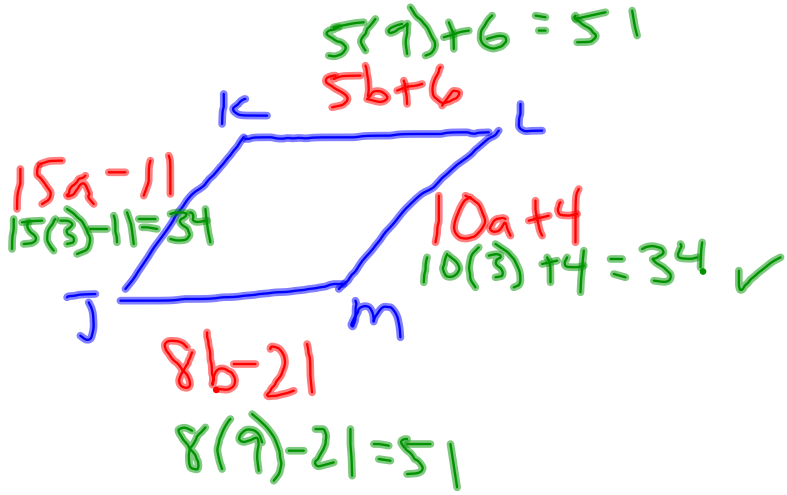
∠1 & ∠4 are supp, & ∠1 & 2 are supp

6-3-5: if the diagonals of a quad. bisect each other, then its a ▱

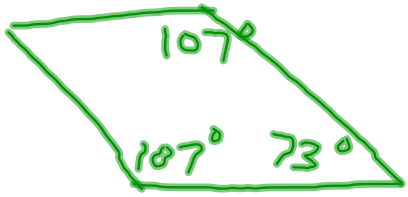
Ex: 

Ex: show JKLM is a ▱

for $a = 3$ & $b = 9$.

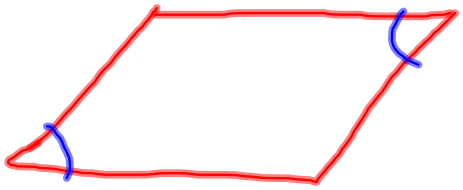


Determine if each quad is a ▱



Yes by 6-3-4

$107 + 73 = 180°$



No

HW: p. 402

2-22 even, odds extra credit