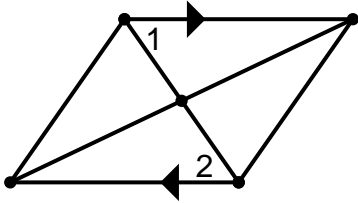
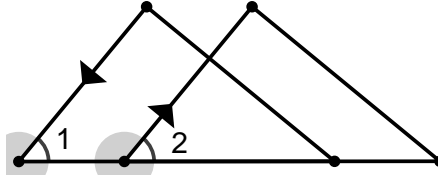


In each picture, a pair of parallel lines is marked. Name a pair of angles that are congruent or supplementary and state the parallel line theorem that justifies your conclusion.

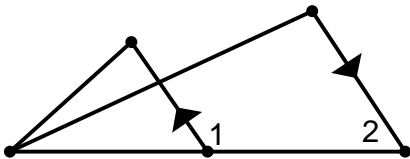
1.



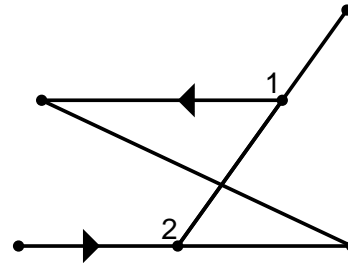
2.



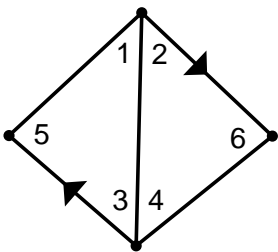
3.



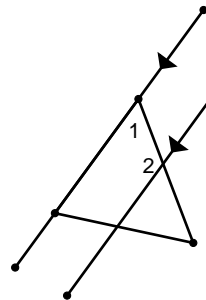
4.



5.

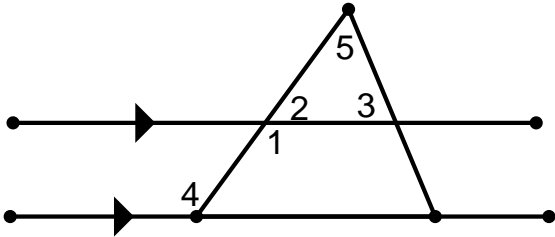


6.

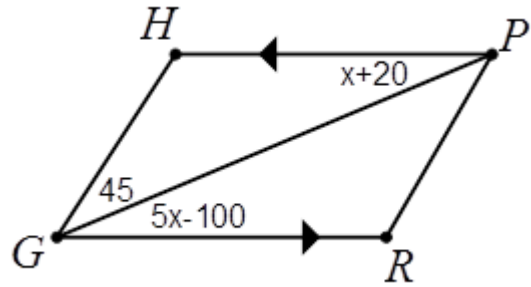


Use the parallel line theorems to solve for the variable:

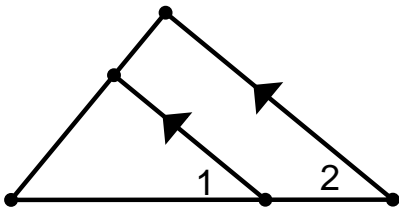
7. $m\angle 1 = 3x+10$, $m\angle 4 = 110$



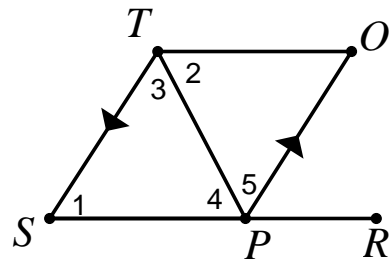
8.



9. $m\angle 1 = 6x+30$, $m\angle 2 = 4x+36$.



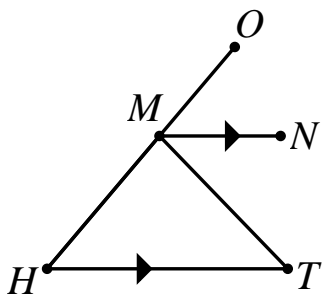
10. $m\angle 1 = 50$, $m\angle 4 = x+30$, $m\angle 5 = 2x+10$



Complete a Two-Column Proof:

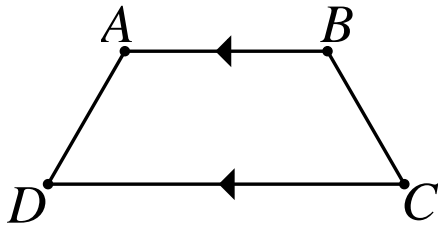
11. Given: $\overline{MN} \parallel \overline{HT}$
 \overline{MT} bisects $\angle HMN$

Prove: $\angle HMT \cong \angle HTM$



12. Given: $\overline{AB} \parallel \overline{DC}$
 $\angle D \cong \angle C$

Prove: $\angle A \cong \angle B$



Complete a Paragraph Proof:

13. Given: Parallelogram ABCD
 $\angle 2 \cong \angle 3$

Prove: $\angle 1 \cong \angle 3$

