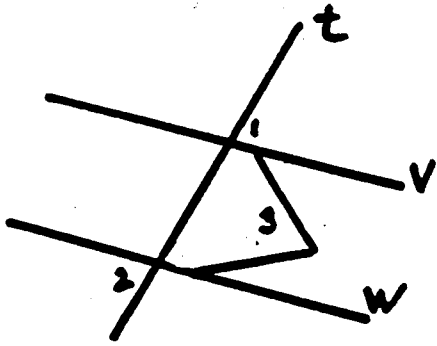


# Worksheet Parallel Line Proofs #1

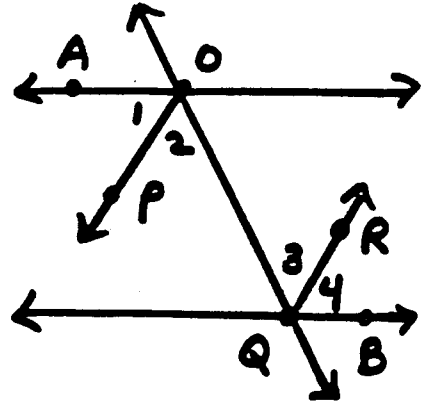
Name \_\_\_\_\_  
Geom. Per. \_\_\_\_\_

1.



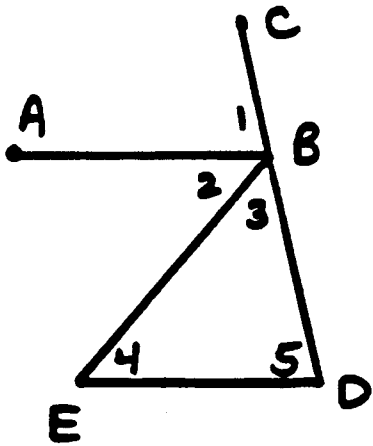
Given:  $V \parallel W$   
 $\angle 2 \cong \angle 3$   
Prove:  $\angle 1 \cong \angle 3$

2.



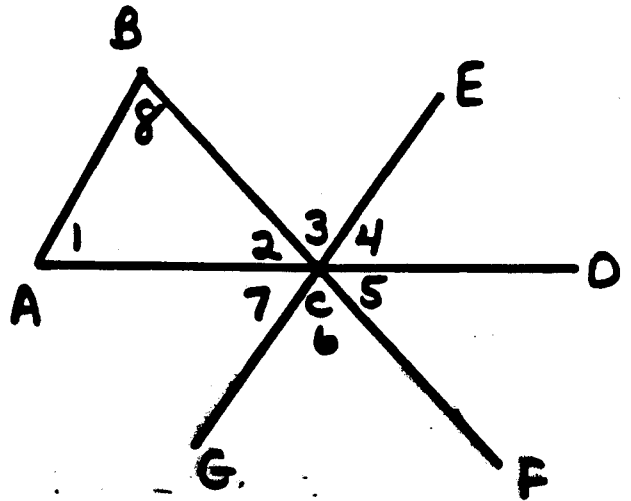
Given:  $\overrightarrow{OP} \parallel \overrightarrow{QR}$   
 $\overrightarrow{OP}$  bisects  $\angle AOQ$   
 $\overrightarrow{QR}$  bisects  $\angle BQC$   
Prove:  $\angle 1 \cong \angle 4$

3.



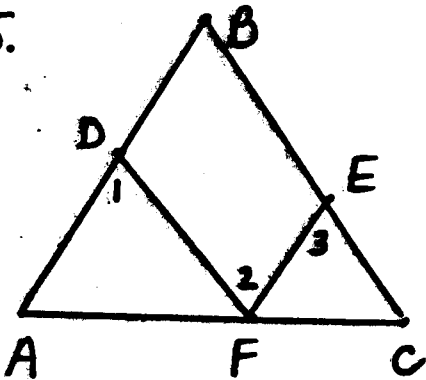
Given:  $\overline{AB} \parallel \overline{ED}$   
 $\angle 4 \cong \angle 5$   
Prove:  $\angle 1 \cong \angle 2$

4.



Given:  $\overline{AB} \parallel \overline{GE}$   
 $\angle 1 \cong \angle 8$   
Prove:  $\angle 6 \cong \angle 4$

5.

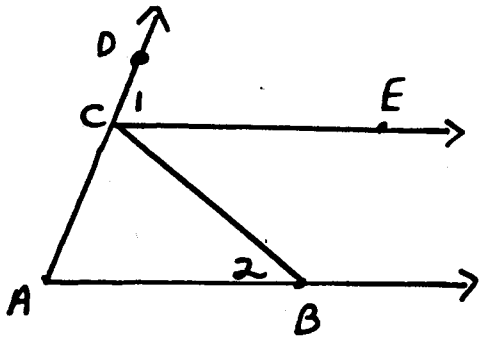


Given:  $\overline{AB} \parallel \overline{FE}$   
 $\overline{BC} \parallel \overline{DF}$   
Prove:  $\angle 1 \cong \angle 3$

# Worksheet Parallel Line Proofs #2

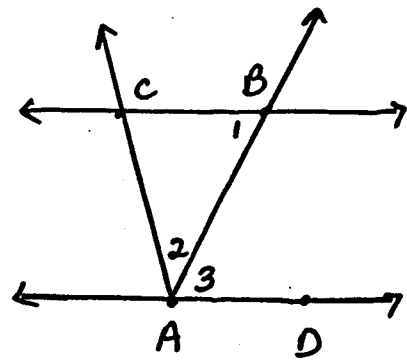
Name \_\_\_\_\_  
 Geom. Per. \_\_\_\_\_

①



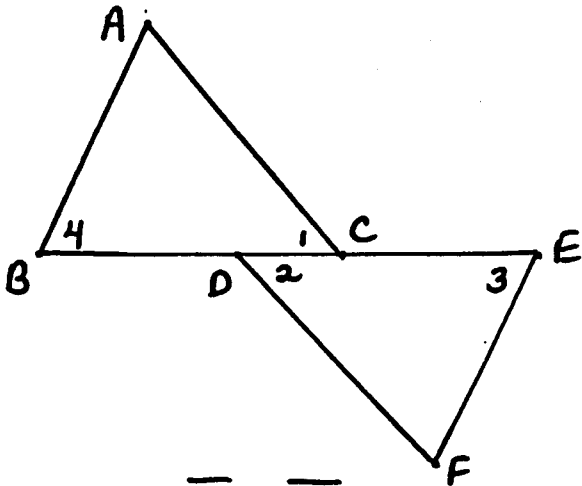
Given:  $\overrightarrow{CE} \parallel \overrightarrow{AB}$   
 $\angle A \cong \angle 2$   
 Prove:  $\angle 1 \cong \angle 2$

②



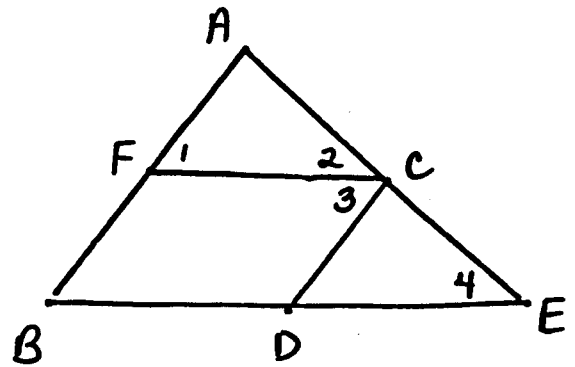
Given:  $\overrightarrow{AB}$  bisects  $\angle CAD$   
 $\overrightarrow{CB} \parallel \overrightarrow{AD}$   
 Prove:  $\angle 1 \cong \angle 2$

③



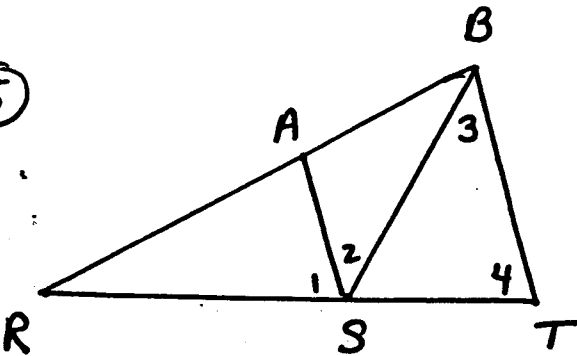
Given:  $\overline{AC} \parallel \overline{DF}$   
 $\overline{AB} \parallel \overline{FE}$   
 $\angle 2 \cong \angle 3$   
 Prove:  $\angle 1 \cong \angle 4$

④

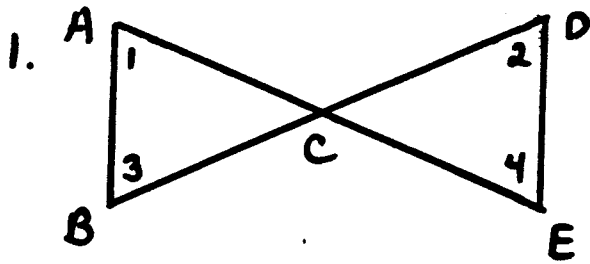


Given:  $\overline{AB} \parallel \overline{CD}$   
 $\overline{FC} \parallel \overline{BE}$   
 $\overrightarrow{CF}$  bisects  $\angle ACD$   
 Prove:  $\angle 1 \cong \angle 4$

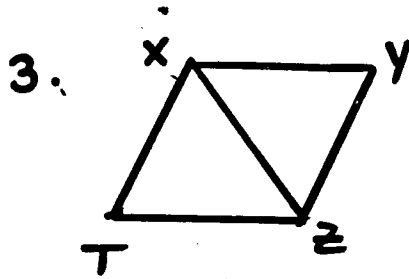
⑤



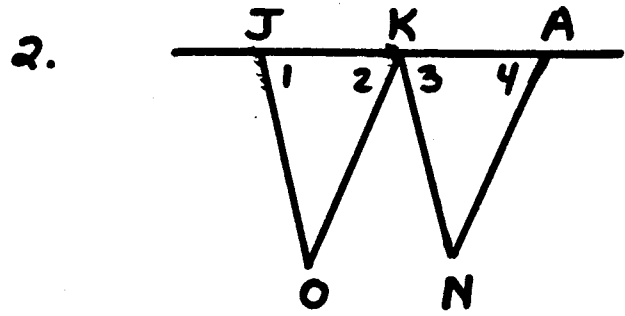
Given:  $\overline{AS} \parallel \overline{BT}$   
 $\angle 3 \cong \angle 4$   
 Prove:  $\angle 1 \cong \angle 2$



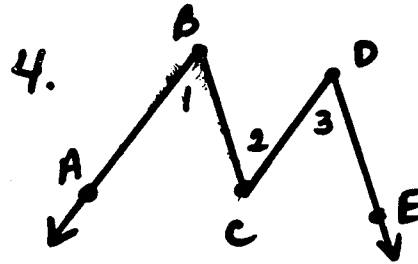
Given:  $\angle 1 \cong \angle 2$   
 $\angle 3 \cong \angle 4$   
 Prove:  $\overline{AB} \parallel \overline{DE}$



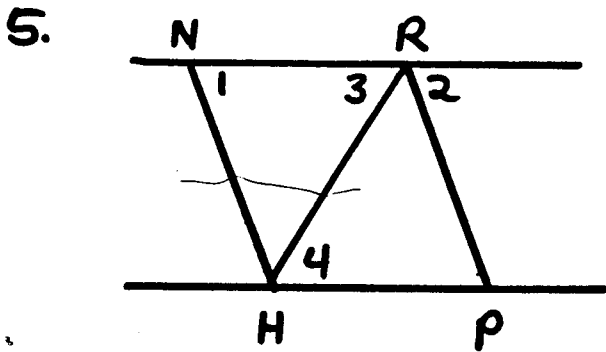
Given:  $\overline{XY} \parallel \overline{TZ}$   
 $\overline{XZ}$  bisects  $\angle TXY$   
 and  $\angle TZY$   
 Prove:  $\overline{XT} \parallel \overline{YZ}$



Given:  $\overline{JO} \parallel \overline{KN}$   
 $\angle 1 \cong \angle 2$   
 $\angle 3 \cong \angle 4$   
 Prove:  $\overline{KO} \parallel \overline{AN}$



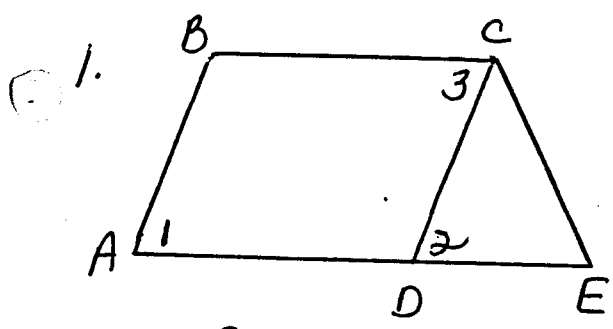
Given:  $\overrightarrow{BA} \parallel \overrightarrow{CD}$   
 $\angle 1 \cong \angle 3$   
 Prove:  $\overrightarrow{BC} \parallel \overrightarrow{DE}$



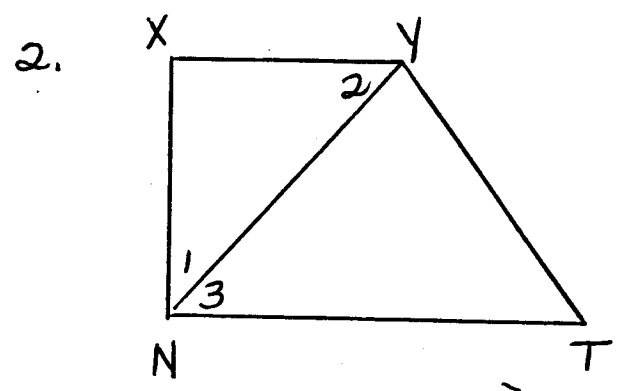
Given:  $\overline{NR} \parallel \overline{HP}$   
 $\angle 1 \cong \angle 4$   
 $\angle 2 \cong \angle 3$   
 Prove:  $\overline{NH} \parallel \overline{RP}$

# Worksheet Parallel Line Proofs #4

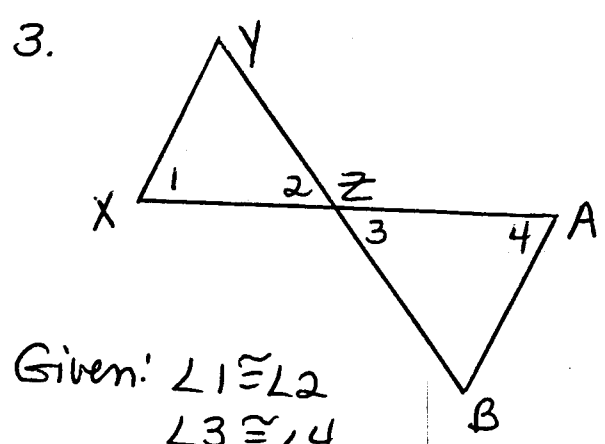
Name \_\_\_\_\_  
 Geom. Per. \_\_\_\_\_



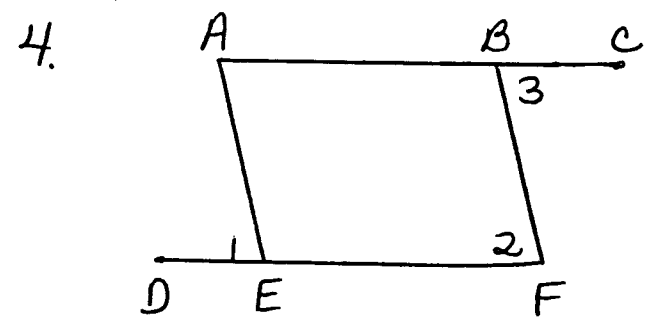
Given:  $\overline{BC} \parallel \overline{AE}$   
 $\angle 1 \cong \angle 3$   
 Prove:  $\overline{BA} \parallel \overline{CD}$



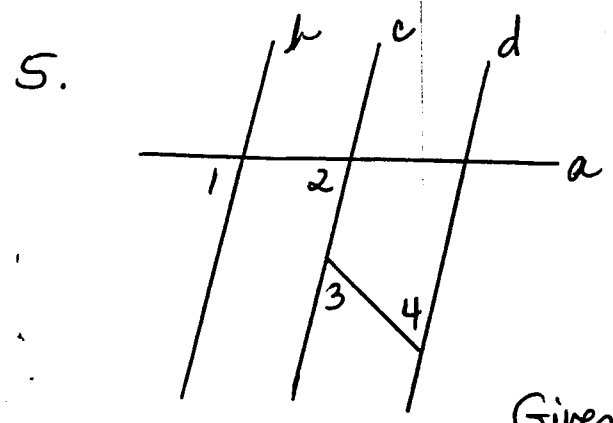
Given:  $\overrightarrow{NY}$  bisects  $\angle XNT$   
 $\angle 1 \cong \angle 2$   
 Prove:  $\overline{XY} \parallel \overline{NT}$



Given:  $\angle 1 \cong \angle 2$   
 $\angle 3 \cong \angle 4$   
 Prove:  $\overline{XY} \parallel \overline{AB}$



Given:  $\overline{AE} \parallel \overline{BF}$   
 $\angle 1 \cong \angle 3$   
 Prove:  $\overline{AB} \parallel \overline{EF}$



Given:  $\angle 1 \cong \angle 2$   
 $\angle 3 \cong \angle 4$   
 Prove:  $b \parallel d$