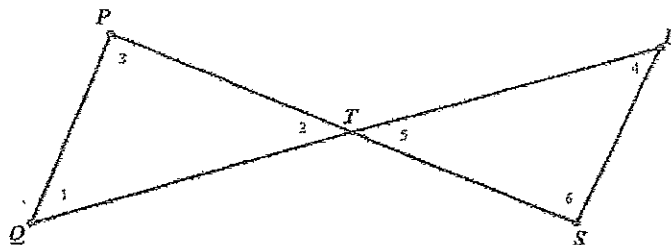


3.4 - Parallel Lines Proofs Practice - Worksheet #2

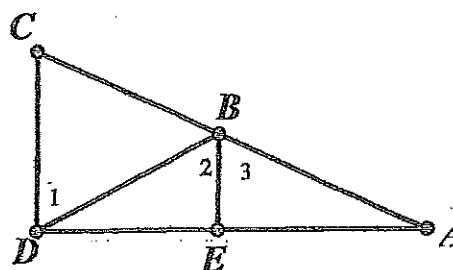
1. Given: $\angle 1 \cong \angle 2$; $\angle 4 \cong \angle 5$

Prove: $\overline{PQ} \parallel \overline{RS}$



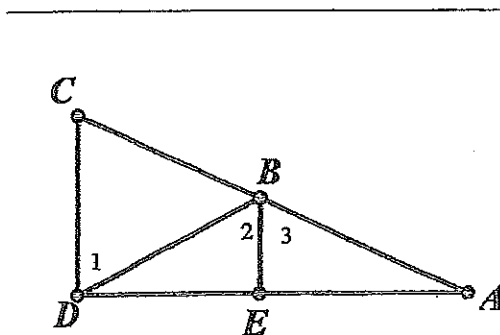
2. Given: $\overline{BE} \perp \overline{DA}$
 $\overline{CD} \perp \overline{DA}$

Prove: $\angle 1 \cong \angle 2$

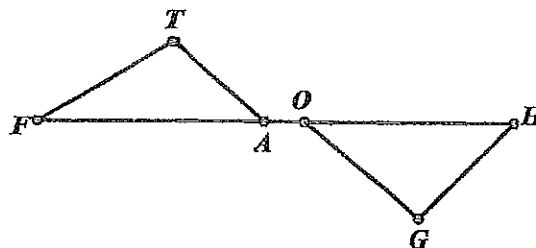


3. Given: $\angle C \cong \angle 3$
 $\overline{BE} \perp \overline{DA}$

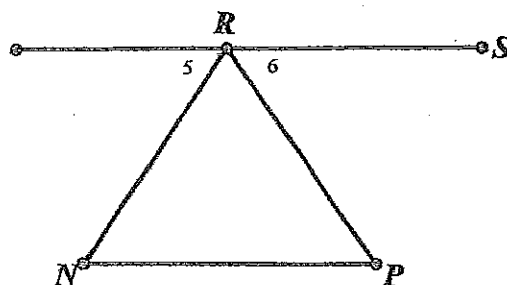
Prove: $\overline{CD} \perp \overline{DA}$



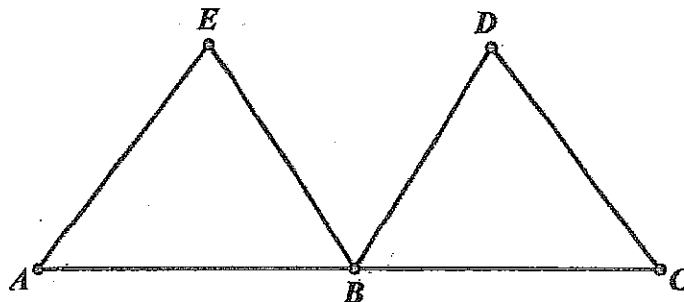
7. Given: $\angle FAT \cong \angle HOG$
 Prove: $\overline{AT} \parallel \overline{GO}$



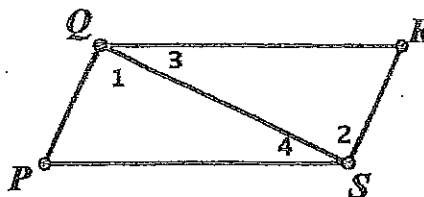
8. Given: $\angle 5 \cong \angle 6$; $\overline{RS} \parallel \overline{NP}$
 Prove: $\angle RNP \cong \angle RPN$



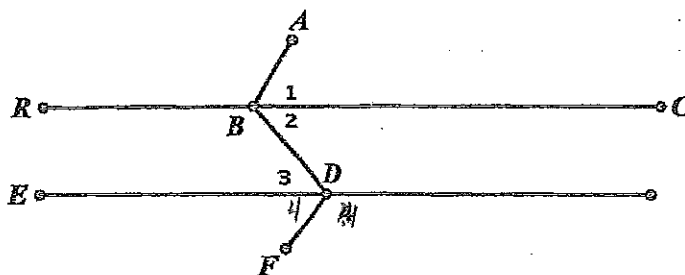
9. Given: $\overline{EA} \parallel \overline{DB}$
 $\overline{EA} \cong \overline{DB}$
 B is the midpoint of \overline{AC}
 Prove: $\overline{EB} \parallel \overline{DC}$



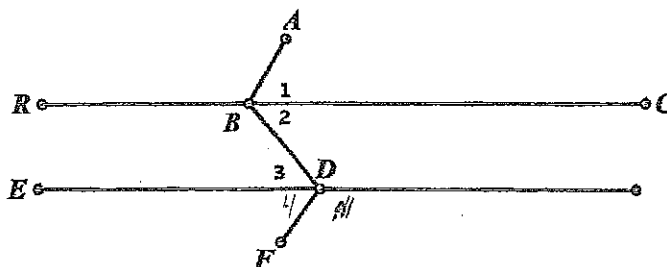
- Given: $\angle 1 \cong \angle 2$
13. $\angle PQR \cong \angle RSP$
 Prove: PQRS is a parallelogram



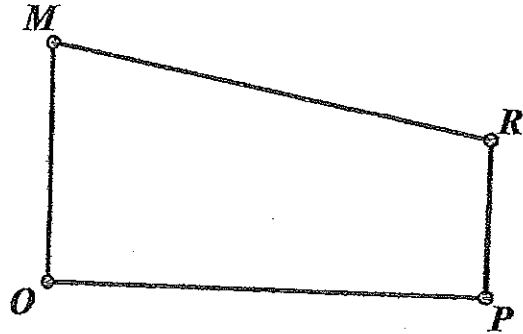
- Given: $m\angle 1 = m\angle 4$
14. $\overline{BC} \parallel \overline{ED}$
 Prove: $\overline{AB} \parallel \overline{DF}$



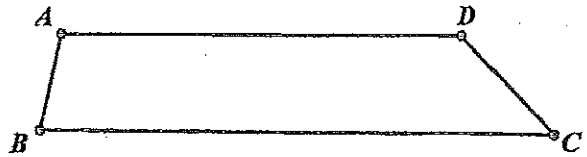
- Given: $m\angle ABD = m\angle FDB$
15. $m\angle 1 = m\angle 4$
 Prove: $\overline{BC} \parallel \overline{ED}$



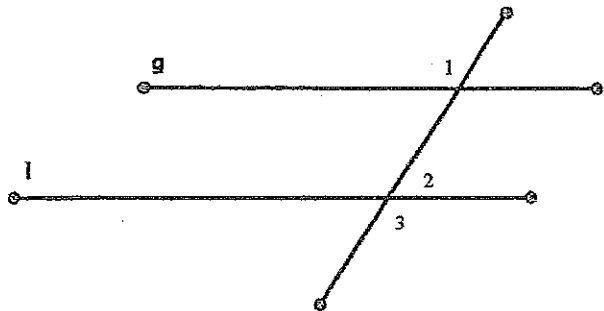
10. *Given : $\angle MOP$ is a right angle*
 $\therefore \overline{OP} \perp \overline{RP}$
Prove : $\overline{MO} \parallel \overline{RP}$



11. *Given : $\angle C$ supplementary to $\angle D$*
Prove : $\angle A$ supplementary to $\angle B$



12. *Given : $g \parallel l$*
Prove : $\angle 1$ is supplementary to $\angle 2$

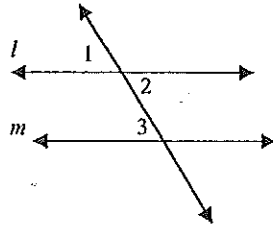


Parallel Lines Proof Worksheet

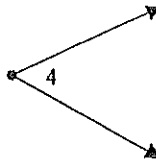
Name _____

Write a 2 column or flow proof on your own paper.

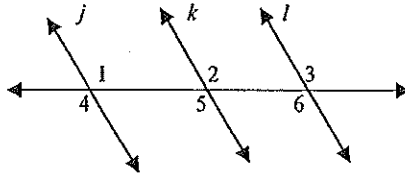
1. Given: $l \parallel m$; $\angle 2 \cong \angle 4$
 Prove: $\angle 4 \cong \angle 3$



2. Given: $l \parallel m$; $\angle 1 \cong \angle 4$
 Prove: $\angle 3 \cong \angle 4$

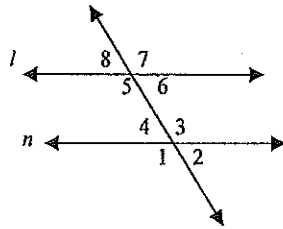


3. Given: $j \parallel k, k \parallel l$
 Prove: $\angle 1 \cong \angle 3$



4. Given: $j \parallel k, k \parallel l$
 Prove: $\angle 1 \cong \angle 6$

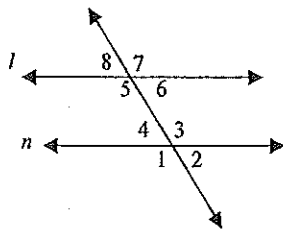
5. Given: $l \parallel n$
 Prove: $m\angle 3 + m\angle 6 = 180^\circ$



6. Given: $l \parallel n$
 Prove: $m\angle 2 + m\angle 7 = 180^\circ$

3.4

7. Given: $m\angle 1 = 101^\circ, m\angle 5 = 101^\circ$
 Prove: $l \parallel n$



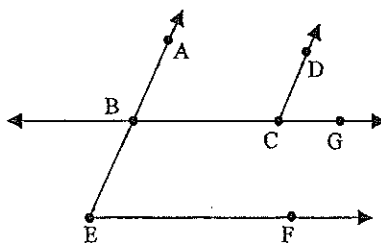
8. Given: $m\angle 3 = 105^\circ, m\angle 6 = 75^\circ$
 Prove: $l \parallel n$

Use for #7 - #10

9. Given: $\angle 8 \cong \angle 2$
 Prove: $l \parallel n$

10. Given: $\angle 7$ is supplementary to $\angle 2$
 Prove: $l \parallel n$

11. Given: $m\angle BCD + m\angle BEF = 180^\circ, \overline{AB} \parallel \overline{DC}$
 Prove: $\overline{BC} \parallel \overline{EF}$



12. Given: $\overline{BC} \parallel \overline{EF}, \angle BEF \cong \angle DCG$
 Prove: $\overline{AB} \parallel \overline{DC}$