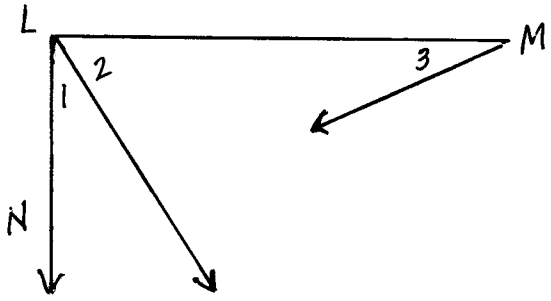
2-Column Proofs

1.



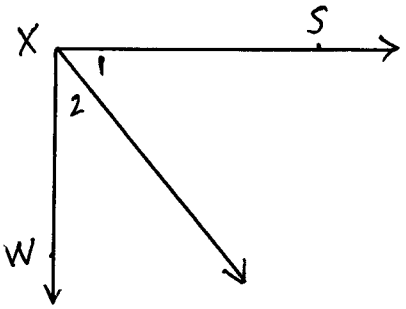
Given $m\angle NLM = 90°$

$m\angle 1 = m\angle 3$

Prove $m\angle 3 + m\angle 2 = 90°$

1. $m\angle 1 + m\angle 2 = m\angle NLM$	1.
2. $m\angle NLM = 90°$	2.
3. $m\angle 1 + m\angle 2 = 90°$	3.
4. $m\angle 1 = m\angle 3$	4.
5. $m\angle 3 + m\angle 2 = 90°$	5.

2.

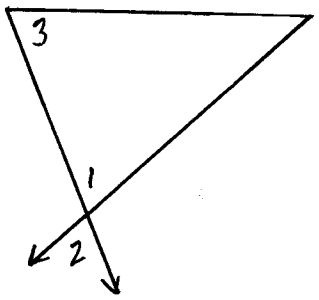


Given $\angle 1$ and $\angle 2$ are comps

Prove $\overline{SX} \perp \overline{WX}$

1. $\angle 1$ and $\angle 2$ are comps	1.
2. $m\angle 1 + m\angle 2 = 90°$	2.
3. $m\angle 1 + m\angle 2 = m\angle WXS$	3.
4. $m\angle WXS = 90°$	4.
5. $\angle WXS$ is a rt $\angle$	5.
6. $\overline{SX} \perp \overline{WX}$	6.

3.

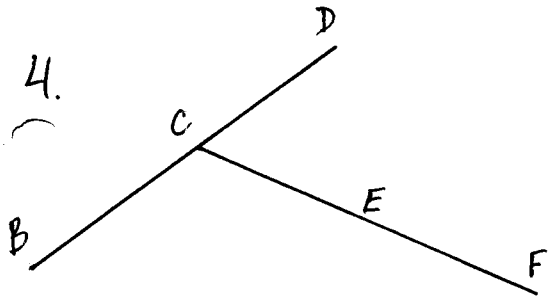


Given $m\angle 1 = m\angle 3$

Prove $m\angle 2 = m\angle 3$

1. $m\angle 1 = m\angle 2$	1.
2. $m\angle 1 = m\angle 3$	2.
3. $m\angle 2 = m\angle 3$	3.

4.

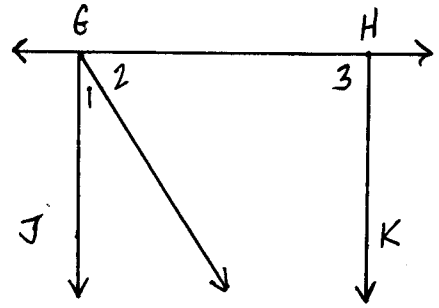


Given $DC = CE$, $CB = EF$

Prove $BD = CF$

1. $DC = CE$, $CB = EF$	1.
2. $DC + CB = CE + EF$	2.
3. $DC + CB = BD$ $CE + EF = CF$	3.
4. $BD = CF$	4.

5.



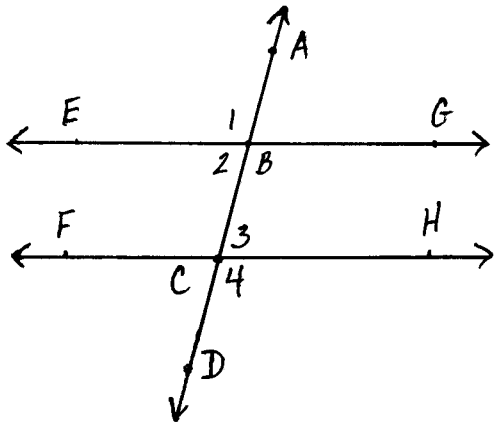
Given $m\angle JGH = 90°$

$m\angle 3 = 90°$

Prove $m\angle 1 + m\angle 2 = m\angle 3$

1. $m\angle 1 + m\angle 2 = m\angle JGH$	1.
2. $m\angle JGH = 90°$	2.
3. $m\angle 1 + m\angle 2 = 90°$	3.
4. $m\angle 3 = 90°$	4.
5. $m\angle 1 + m\angle 2 = m\angle 3$	5.

6.



Given $\angle 2 \cong \angle 3$

Prove $\angle 1 \cong \angle 4$

1. $m\angle 1 + m\angle 2 = 180°$ $m\angle 3 + m\angle 4 = 180°$	1.
2. $\angle 1$ and $\angle 2$ are supps $\angle 3$ and $\angle 4$ are supps	2.
3. $\angle 2 \cong \angle 3$	3.
4. $\angle 1 \cong \angle 4$	4.