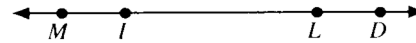


PROOF WORKSHEET

1) Given: $MI = LD$

Prove: $ML = ID$

Proof:

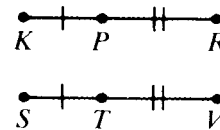


STATEMENTS	REASONS
1) $MI = LD$	1)
2) $IL = IL$	2)
3) $MI + IL = LD + IL$	3)
4) $MI + IL = ML; LD + IL = ID$	4)
5) $ML = ID$	5)

2) Given: $KP = ST; PR = TV$

Prove: $KR = SV$

Proof:

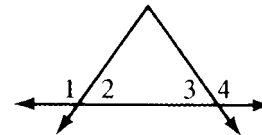


STATEMENTS	REASONS
1)	1)
2) $KP + PR = ST + TV$	2)
3) $KP + PR = KR; ST + TV = SV$	3)
4)	4)

3) Given: $m(\angle 1) = m(\angle 4)$

Prove: $m(\angle 2) = m(\angle 3)$

Proof:

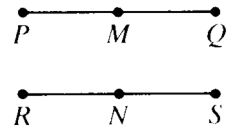


STATEMENTS	REASONS
1) $m(\angle 1) + m(\angle 2) = 180; m(\angle 3) + m(\angle 4) = 180$	1)
2) $m(\angle 1) + m(\angle 2) = m(\angle 3) + m(\angle 4)$	2)
3)	3) Given
4)	4)

4) Given: M is the midpoint of \overline{PQ} ; N is the midpoint of \overline{RS} ; $PQ = RS$

Prove: $PM = RN$

Proof:

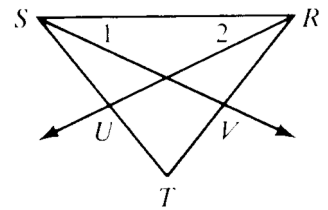


STATEMENTS	REASONS
1) M is the midpt of \overline{PQ} ; N is the midpt of \overline{RS}	1)
2) $PM = \frac{1}{2}PQ$; $RN = \frac{1}{2}RS$	2)
3)	3) Given
4) $\frac{1}{2}PQ = \frac{1}{2}RS$	4)
5)	5)

5) Given: \overline{SV} bisects $\angle RST$; \overline{RU} bisects $\angle SRT$; $m(\angle RST) = m(\angle SRT)$

Prove: $m(\angle 1) = m(\angle 2)$

Proof:

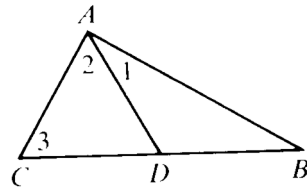


STATEMENTS	REASONS
1) \overline{SV} bisects $\angle RST$; \overline{RU} bisects $\angle SRT$	1)
2) $m(\angle 1) = \frac{1}{2}m(\angle RST)$; $m(\angle 2) = \frac{1}{2}m(\angle SRT)$	2)
3)	3) Given
4) $\frac{1}{2}m(\angle RST) = \frac{1}{2}m(\angle SRT)$	4)
5)	5)

6) Given: $\overline{BA} \perp \overline{AC}$; $\angle 1$ is complementary to $\angle 3$

Prove: $m(\angle 2) = m(\angle 3)$

Proof:

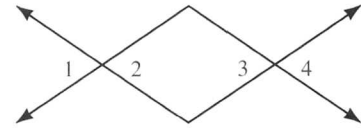


STATEMENTS	REASONS
1) $\overline{BA} \perp \overline{AC}$	1)
2) $\angle 1$ and $\angle 2$ are complementary.	2)
3) $\angle 1$ and $\angle 3$ are complementary.	3)
4) $m(\angle 1) + m(\angle 2) = 90^\circ$; $m(\angle 1) + m(\angle 3) = 90^\circ$	4)
5) $m(\angle 1) + m(\angle 2) = m(\angle 1) + m(\angle 3)$	5)
6)	6) Reflexive Property
7)	7)

7) Given: $\angle 2 \cong \angle 3$

Prove: $\angle 1 \cong \angle 4$

Proof:



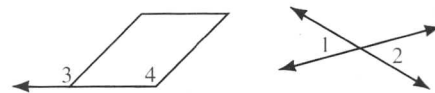
STATEMENTS	REASONS
1) $\angle 2 \cong \angle 3$	1)
2) $\angle 1 \cong \angle 2$	2)
3)	3) Substitution Property
4)	4) Vertical angles are congruent
5) $\angle 1 \cong \angle 4$	5)

8) Given: $\angle 3$ is supplementary to $\angle 1$;

$\angle 4$ is supplementary to $\angle 2$

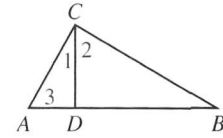
Prove: $\angle 3 \cong \angle 4$

Proof:



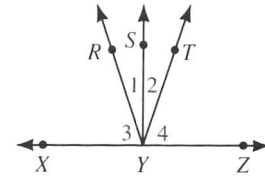
STATEMENTS	REASONS
1)	1) Given
2) $\angle 1 \cong \angle 2$	2)
3) $\angle 3 \cong \angle 4$	3)

- 9) Given: $\overline{AC} \perp \overline{BC}$;
 $\angle 3$ is complementary to $\angle 1$
 Prove: $\angle 3 \cong \angle 2$
 Proof:



STATEMENTS	REASONS
1) $\overline{AC} \perp \overline{BC}$; $\angle 3$ is complementary to $\angle 1$	1)
2) $\angle 2$ is complementary to $\angle 1$	2)
3) $\angle 3 \cong \angle 2$	3)

- 10) Given: $m(\angle 1) = m(\angle 2)$;
 $m(\angle 3) = m(\angle 4)$
 Prove: $\overline{YS} \perp \overline{XZ}$
 Proof:



STATEMENTS	REASONS
1) $m(\angle 1) = m(\angle 2)$; $m(\angle 3) = m(\angle 4)$	1)
2) $m(\angle 1) + m(\angle 3) = m(\angle 2) + m(\angle 4)$	2)
3)	3) Angle Addition Postulate
4) $m(\angle XYS) = m(\angle SYZ)$ or $\angle XYS \cong \angle SYZ$	4)
5) $\overline{YS} \perp \overline{XZ}$	5)