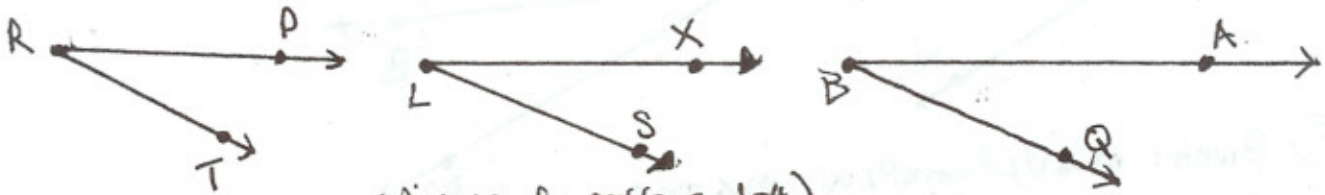
Name _____

Block _____

Due Date _____

Introduction to Proofs #2

Fill in the missing steps for each proof:



(Picture for problems 1-4)

① Given: $m\angle PRT = 25°$
$m\angle XLS = 25°$
Prove: $m\angle PRT = m\angle XLS$

1. $m\angle PRT = 25°$	1. _____
2. $m\angle XLS = 25°$	2. _____
3. _____	3. Symm Prop = (2)
4. _____	4. Trans Prop = (1,3)

② Given: $m\angle PRT = m\angle XLS$
$m\angle XLS = m\angle ABQ$
Prove: $\angle PRT \cong \angle ABQ$

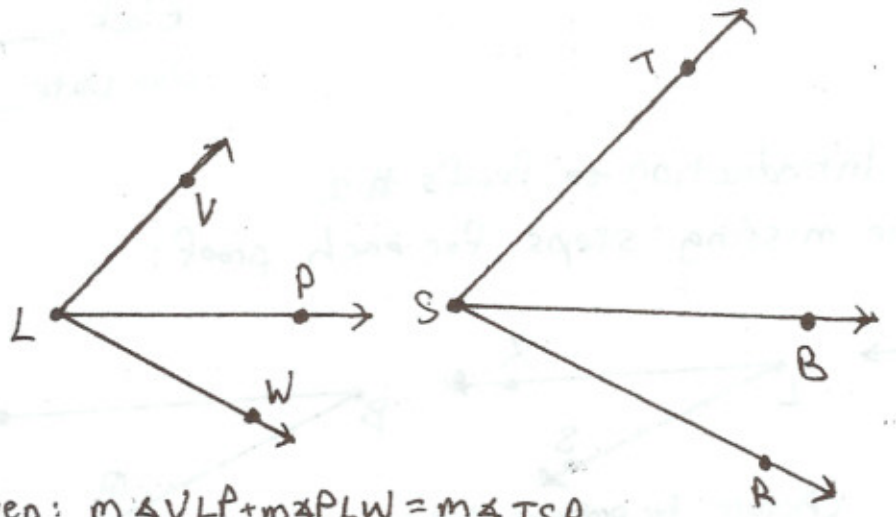
1. _____	1. Given
2. _____	2. Given
3. $m\angle PRT = m\angle ABQ$	3. _____
4. _____	4. _____

③ Given: $m\angle PRT = m\angle ABQ$
Prove: $m\angle PRT + m\angle XLS = m\angle ABQ + m\angle XLS$

1. _____	1. Given
2. _____	2. Refl Prop =
3. _____	3. _____

④ Given: $\angle PRT \cong \angle ABQ$
$\angle ABQ \cong \angle XLS$
Prove: $\angle PRT \cong \angle XLS$

1. _____	1. Given
2. _____	2. Def $\cong \angle$'s (1)
3. $\angle ABQ \cong \angle XLS$	3. _____
4. $m\angle ABQ = m\angle XLS$	4. _____
5. _____	5. Trans Prop = (2,4)
6. _____	6. _____



(5) Given: $m\angle VLP + m\angle PLW = m\angle TSR$

Prove: $\angle VLW \cong \angle TSR$

1. _____ 1. Given
2. _____ 2. $\angle$ Addition Postulate
3. $m\angle VLW = m\angle VLP + m\angle PLW$ 3. _____ (2)
4. $m\angle VLW = m\angle TSR$ 4. _____ (3, 1)
5. _____ 5. Def $\cong$ $\angle$'s (4)

Given:

★ (6) $m\angle VLP = m\angle PLW$

$m\angle PLW = m\angle TSB$

$m\angle TSB = m\angle BSR$

Prove: $m\angle VLP = m\angle BSR$

1. _____ 1. Given
2. _____ 2. Def $\cong$ $\angle$'s (1)
3. $m\angle PLW = m\angle TSB$ 3. _____
4. $m\angle VLP = m\angle TSB$ 4. Trans Prop = (1, 3)
5. _____ 5. Given
6. $m\angle VLP = m\angle BSR$ 6. _____ (__, __)

★★ Which step in #6 is unnecessary? Why?