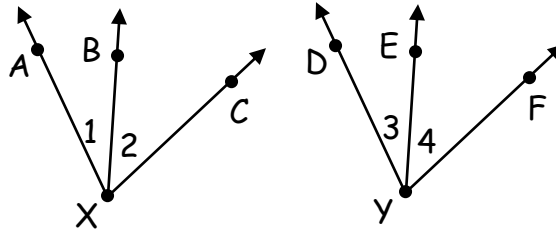


PAP Geometry
2.3 Proof HW – Day 1

Name _____

- 1)
Given: $m\angle AXC = m\angle DYF$
 $m\angle 1 = m\angle 3$

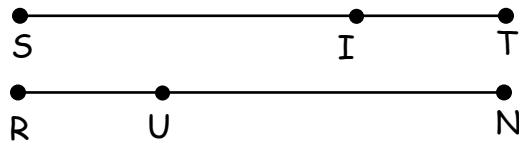
Prove: $m\angle 2 = m\angle 4$



REASON BANK
Substitution
Angle Addition Post
Given
SPOE
Transitive

Statements	Reasons
1. $m\angle AXC = m\angle DYF$ $m\angle 1 = m\angle 3$	1. _____
2. $m\angle AXC = m\angle 1 + m\angle 2$ $m\angle DYF = m\angle 3 + m\angle 4$	2. _____
3. $m\angle 1 + m\angle 2 = m\angle 3 + m\angle 4$	3. _____
4. $m\angle 3 + m\angle 2 = m\angle 3 + m\angle 4$	4. _____
5. $m\angle 2 = m\angle 4$	5. _____

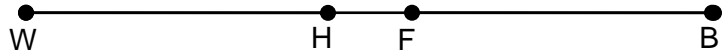
- 2) Given: $ST = RN$
 $IT = RU$
Prove: $SI = UN$



Statements	Reasons
1. $ST = RN$ $IT = RU$	1. _____
2. _____ = $SI + IT$ _____ = $RU + UN$	2. _____
3. $SI + IT = RU + UN$	3. _____
4. _____	4. _____

3) Given : $WH = FB$

Prove : $WF = HB$



Statements	Reasons
1. $WH = FB$	1.
2. $WH + HF = FB + HF$	2.
3. $HF + FB = HB$	3.
$WH + HF = WF$	
5. $WH = FB + HF$	5.
6. $WF = HB$	6.

For 4 and 5, solve the algebra problem and give a reason for each step.

4) $\frac{1}{2}(8x - 6) = 37$

5) $4(5x - 9) = -2(x + 7)$

step

reason

step

reason
