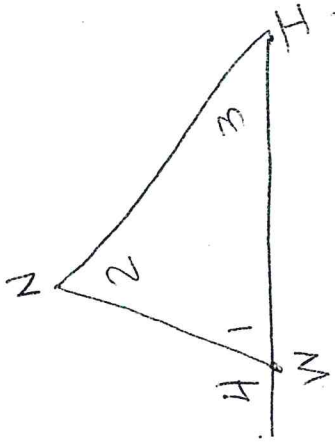


In Class Section

Copy sketch, given, show, then copy proof and fill in the blanks.



Substitution Property
 $m\angle 1 + m\angle 2 + m\angle 3 = 180^\circ$

Given: $\triangle WIN$ with exterior angle $\angle SWN$

Show: $m\angle 4 = m\angle 2 + m\angle 3$

Why
?

What
 $\triangle WIN$ with exterior $\angle SWN$
 ?

Triangle Sum Theorem
Linear Pair (Postulate)
 ?

$m\angle 1 + m\angle 2 + m\angle 3 = m\angle 1 + m\angle 4$
 ?

Subtraction Prop (equals are equal)
 (name for $\angle 2 + \angle 3$)

The measure of an exterior angle of a triangle is equal to the sum of its _____.

See pp 222-223 in text book.

GIVEN

$m\angle 1 + m\angle 4 = 180^\circ$

$m\angle 4 = m\angle 2 + m\angle 3$

remote interior angles