



Name \_\_\_\_\_

**Lesson 11: Proofs Day 2**

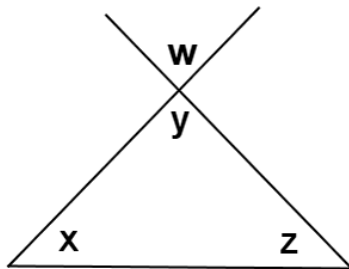
**Warm Up**

**LEARNING TARGET**

I CAN make a plan to write a proof using geometric facts that I know are true.

Given the diagram below:

Prove:  $m\angle w + m\angle x + m\angle z = 180^\circ$ .



Make a plan:

(Hint - Think to yourself, "what geometric facts are relevant to the diagram?")

**SHOW:**

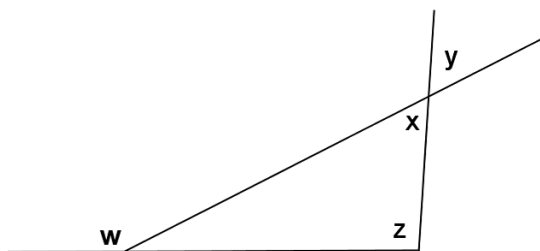
Write out your proof:

STATEMENT	REASON

**Work Time**

1. Given the diagram below:

Prove that  $m\angle w = m\angle y + m\angle z$ .



Make a plan:

(Hint - Think to yourself, "what geometric facts are relevant to the diagram?")

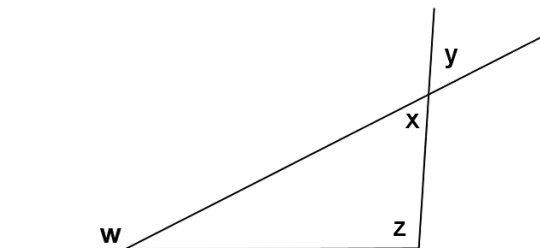
SHOW:

Write out your proof:

STATEMENT	REASON

2. Given the diagram below:

Prove that  $m\angle w = m\angle y + m\angle z$ .



Make a plan:

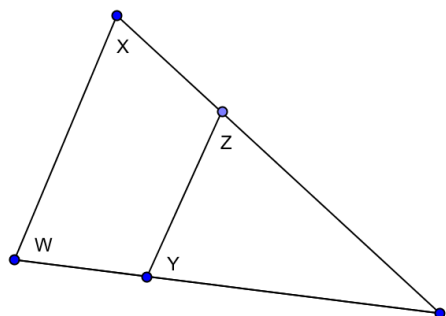
(Hint - Think to yourself, "what geometric facts are relevant to the diagram?")

SHOW:

Write out your proof:

STATEMENT	REASON

3. In the diagram below, prove that  $m\angle y + m\angle z = m\angle w + m\angle x$ .



**(Hint** (You will need to write in a label in the diagram that is not labeled yet for this proof.)

**SHOW:**

Write out your proof:

STATEMENT	REASON