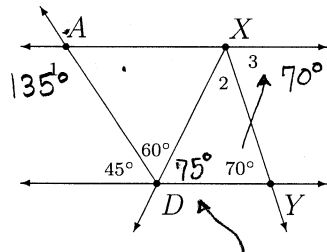# Math 096 - Quiz 5

March 8, 2017

Name ___key___

Score _____

Show all work to receive full credit. Supply explanations when necessary.

1. (5 points) Given the figure shown below with $\overleftrightarrow{AX} \parallel \overleftrightarrow{DY}$, find each of the following:

$135°$ A X 3 $70°$

2

$60°$

$45°$ $75°$ $70°$

D Y

$45 + 60 = 105$
$180 - 105 = 75$

(a) $m(\angle 1)$

$$= 60° + 75° = \boxed{135°}$$

(b) $m(\angle 2)$.

$$180° - (75° + 70°) = \boxed{35°}$$

(c) $m(\angle 3) = \boxed{70°}$

2. (2 point) Find the measure of $\angle A$. Briefly explain your reasoning.

A

$49°$ $39°$ $141°$

$49°$

Vertical ∠'s

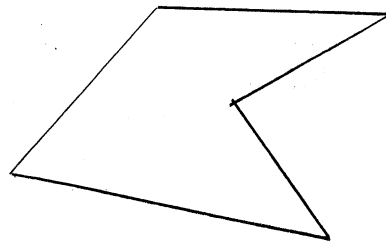Supplementary ∠'s
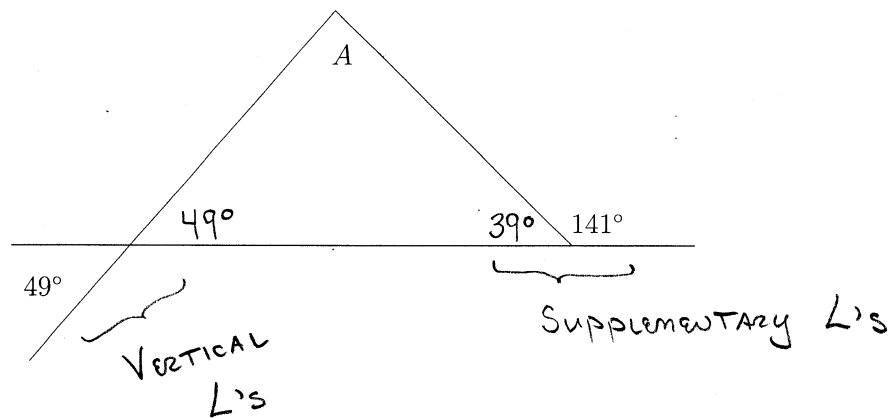
$$m(\angle A) = 180° - (49° + 39°)$$

$$= \boxed{92°}$$

3. (1 point) What is a scalene triangle?

A TRIANGLE WITH NO CONGRUENT SIDES.

FIVE-SIDED & DENTED

4. (1 point) Sketch a concave pentagon.

5. (1 point) One of the interior angles of a right triangle measures 47°. Find the measure of the other acute angle.

$$180° - (90° + 47°) = \boxed{43°}$$