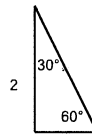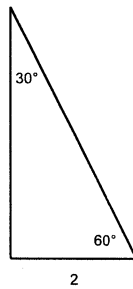# Math 096 - Quiz 6

March 29, 2017

Name __key__

Score _____

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

1. (2 points) The triangles shown here are clearly not congruent. Why doesn't the AAS congruence property apply?
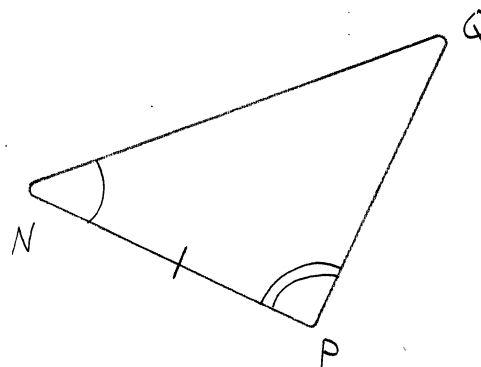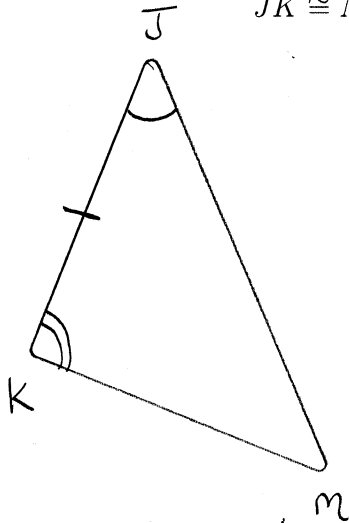

IN THIS △, THE GIVEN SIDE IS ADJACENT TO THE 60° ∠.

IN THIS △, THE GIVEN SIDE IS ADJACENT TO THE 30° ∠.

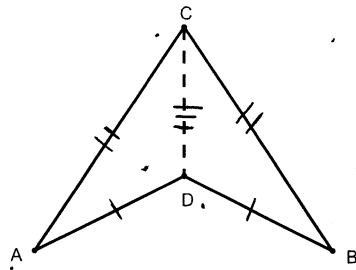THE SIDES DO NOT CORRESPOND.

2. (3 points) Is the following information sufficient to justify $\triangle JKM \cong \triangle NPQ$? Justify your answer.

$$\overline{JK} \cong \overline{NP}, \qquad \angle J \cong \angle N, \qquad \angle K \cong \angle P$$

YES, BY THE ASA PROPERTY.

3. (3 points) The figure shown below is called a kite. In the figure, $\overline{AC} \cong \overline{BC}$ and $\overline{AD} \cong \overline{BD}$. Carefully explain how we can be sure that $\triangle ACD \cong \triangle BCD$.

Congruent by
THE SSS property.

4. (2 points) Circle all that are triangle congruence properties.

AAA, (AAS,) (ASA,) (SAA,) ASS, (SAS,) SSA, (SSS)