Triangle Pre-Assessment

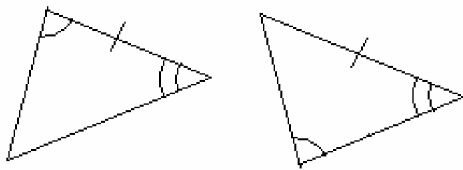_____ 1. Name the angle included by the sides $\overline{PN}$ and $\overline{NM}$.

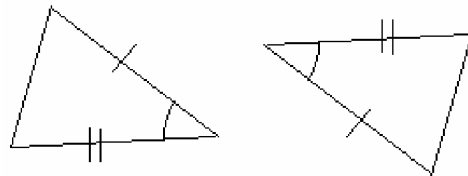N ⟋‾‾‾‾‾‾‾⟍ M

P
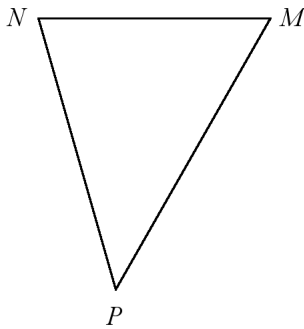
  a.   ∠N   b.   ∠P   c.   ∠M   d.   none of these

_____ 2. Which pair of triangles is congruent by ASA?
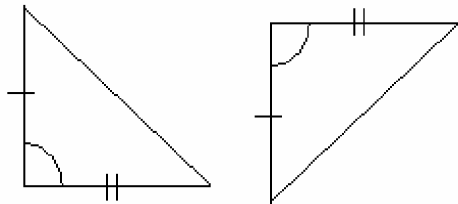
  a.   c.
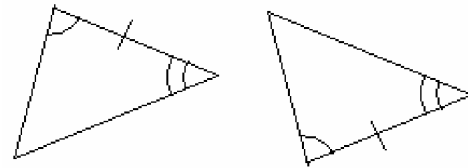
  b.   d.
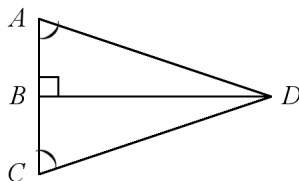
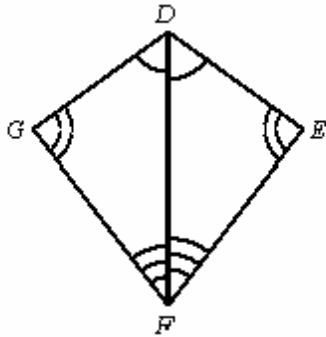_____ 3. Name the theorem or postulate that lets you immediately conclude $\Delta ABD \cong \Delta CBD$.

A

B ⊐ D

C

  a.   AAS   b.   SAS   c.   ASA   d.   none of these
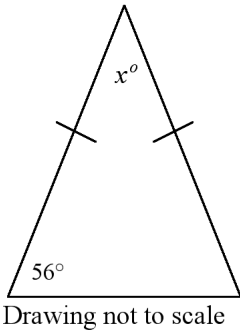
____ 4. From the information in the diagram, can you prove $\triangle FDG \cong \triangle FDE$? Explain.

    a.   yes, by ASA   c.   yes, by SAS
    b.   yes, by AAA   d.   no

____ 5. What is the value of x?

Drawing not to scale

    a.   68°   b.   62°   c.   112°   d.   124°

____ 6. What is the name of the segment inside the large triangle?
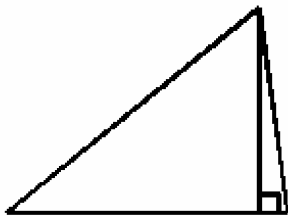
    a.   altitude   c.   angle bisector
    b.   perpendicular bisector   d.   median

_____ 7. List the sides in order from shortest to longest. The diagram is not to scale.

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        J
       /\
      /33° \
     /      \
    /      71° \ K
   /       /
  /    76°/
  /      /
   \    /
    \  /
     L
```
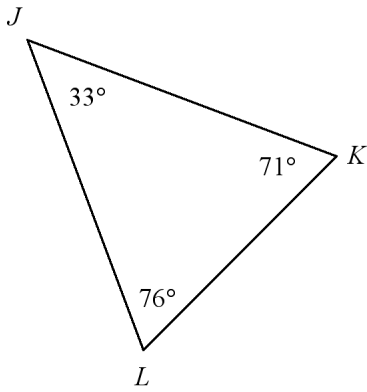
a. $\overline{JK}, \overline{LJ}, \overline{LK}$ b. $\overline{LK}, \overline{LJ}, \overline{JK}$ c. $\overline{JK}, \overline{LK}, \overline{LJ}$ d. $\overline{LK}, \overline{JK}, \overline{LJ}$

8. Can these three segments form the sides of a triangle? Explain.

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              _____
                            c
   _____
     b

   _____
              a
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