Honors Geometry Modules 5 & 6 PracticeTest

Assg#____ Name_____ Date_____

Per____

Determine if the following statements are True or False or fill in the blank.

1. If three sides of one triangle are congruent to three sides of a second triangle, the triangles are congruent.
2. If 2 sides and one angle of a triangle are congruent to 2 sides and one angle of a second triangle, the triangles are congruent.
3. If two triangles are congruent, they must be the same size and shape.
4. If two triangles are congruent, all the corresponding parts are congruent.
5. If in ΔABC and ΔDEF all corresponding angles are congruent, then both triangles are congruent.
6. The side opposite to the right angle in a right triangle is called the _____ of the right triangle.
7. List the five congruence relationships (shortcuts) to prove congruent triangles:_____

   _____
8. Which shortcuts do not work:_____
9. Equilateral triangles are not always congruent.
10. CPCTC stands for:_____
11. Vertical angles are always/sometimes/never congruent.
12. Define the shortest distance from a point to a line:_____
13. The sum of the angles of any triangle = _____

Show all the work algebraically.

$\Delta PQR \cong \Delta CDE$, list the corresponding congruent parts:_____

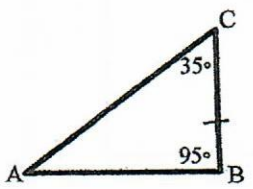
_____

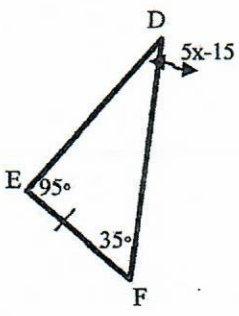
14) *If* $m < Q = 5x + 15$ *and* $m < D = 6x - 3$ *Find the measure of* $< Q$.

15) If QR = 2x + 4 and DE = 5x–2, find the DE.

16) ΔABC *is a right triangle as follows:*
$< C$ *is the right angle,* $m < A = 10x - 15$ *and* $m < B = 6x + 1$.
Find the measure of $< A$.

17) $\Delta ABC \cong \Delta DEF$. Find the value of "x". (Triangles not drawn to scale).



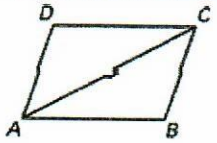


21)

Complete the proof.

Given: $\overline{AB} \parallel \overline{DC}$, $\overline{AB} \cong \overline{DC}$

Prove $\Delta ABC \cong \Delta CDA$



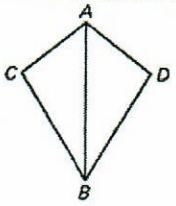
Statements	Reasons
1. $\overline{AB} \cong \overline{DC}$	1. _____
2. $\overline{AB} \parallel \overline{DC}$	2. _____
3. $\angle BAC \cong \angle DCA$	3. _____
4. $\overline{AC} \cong \overline{AC}$	4. _____
5. $\Delta ABC \cong \Delta CDA$	5. _____

22)

Complete the proof.

Given: $\overline{AC} \cong \overline{AD}$, $\overline{BC} \cong \overline{BD}$

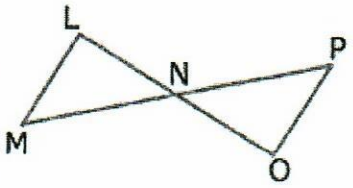
Prove $\angle ACB \cong \angle ADB$



Statements	Reasons
1. $\overline{AC} \cong \overline{AD}$	1. _____
2. $\overline{BC} \cong \overline{BD}$	2. _____
3. $\overline{AB} \cong \overline{AB}$	3. _____
4. $\Delta ACB \cong \Delta ADB$	4. _____
5. $\angle ACB \cong \angle ADB$	5. _____

23) Write a two-column proof:

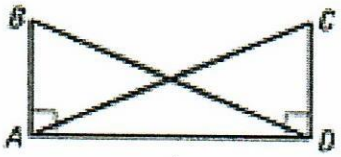
Given: N is the midpoint of $\overline{LO}$
N is the midpoint of $\overline{PM}$
Prove: $\Delta LMN \cong \Delta\Delta OPN$



Statement *Reasons*

24) Write a two-column proof:

Given: <BAD and < CDA are right angles
$\overline{BA} \cong \overline{CD}$
Prove: <B ≅ < C



Statement Reasons