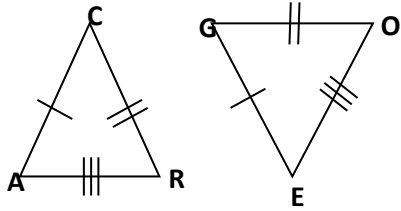


**LEVEL ONE**

1. Write a congruency statement for the following triangles:  $\triangle$ \_\_\_\_\_  $\cong$   $\triangle$ \_\_\_\_\_

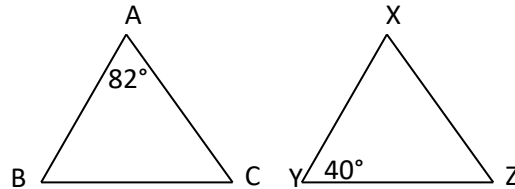


2. Given  $\triangle MON \cong \triangle DAY$ , then ...

a)  $\angle A \cong$  \_\_\_\_\_

b)  $\overline{AD} \cong$  \_\_\_\_\_

2. : Given  $\triangle ABC \cong \triangle XZY$ , find the measure of  $\angle B$ .

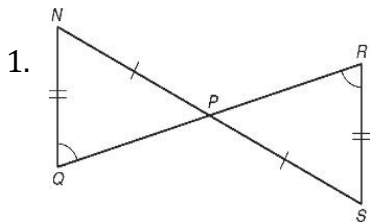


3. List the three transformations that are isometries (figures stay congruent) \_\_\_\_\_

**LEVEL TWO**

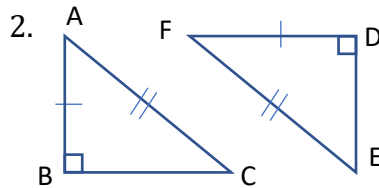
List the FIVE ways to prove triangles congruent:

Write the postulate that proves the triangles congruent (if possible) and name the congruent triangles. If they are not congruent, write NOT CONGRUENT.



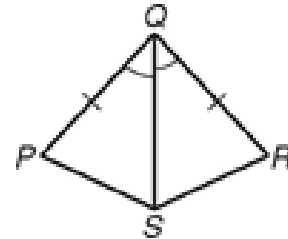
1.  $\triangle NQP \cong$  \_\_\_\_\_

by \_\_\_\_\_



2.  $\triangle ABC \cong$  \_\_\_\_\_

by \_\_\_\_\_

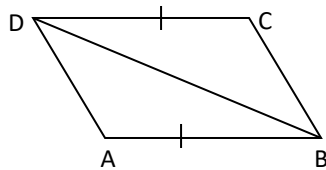


3.  $\triangle PQS \cong$  \_\_\_\_\_

by \_\_\_\_\_

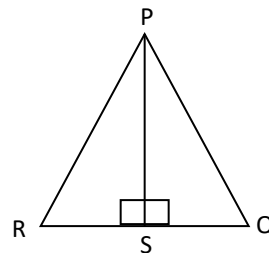
What is the missing piece of information to prove the triangles congruent by the given postulate.

4. Prove by SAS



Missing congruent parts:

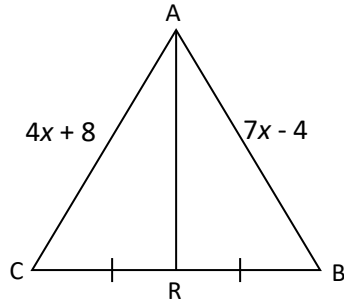
5. Prove by HL



Missing congruent parts:

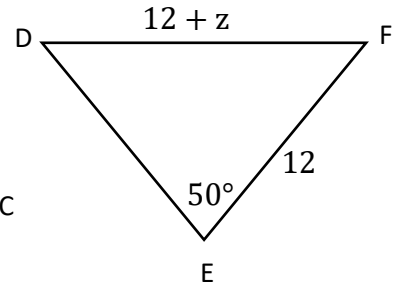
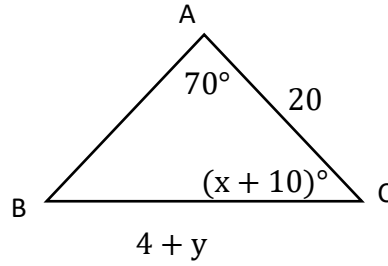
## Level Three

4. Given  $\triangle CAR \cong \triangle BAR$ , find  $x$ .



5. Given:  $\triangle ABC \cong \triangle DEF$

Find  $x, y, z$ .



## Level Four

**PROOFS! WOOHOOO!**

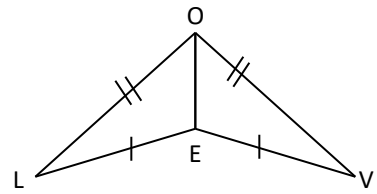
1. What does CPCTC stand for? \_\_\_\_\_

2. Given:  $\overline{LO} \cong \overline{VO}$   
 $\overline{LE} \cong \overline{VE}$

Prove:  $\triangle LEO \cong \triangle VEO$

Statements

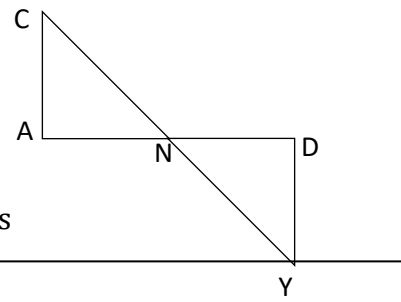
Reasons



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3. Given:  $\angle C \cong \angle Y$   
 N is the midpoint of CY

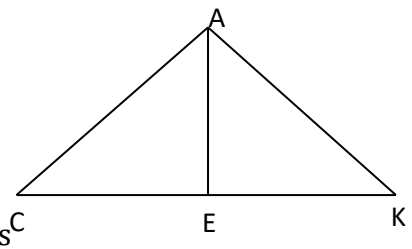
Prove:  $\overline{AN} \cong \overline{DN}$



Statements

Reasons

3. Given:  $\triangle CAK$  is isosceles with base CK  
 $\angle CEA$  and  $\angle KEA$  are right angles  
 Prove:  $\triangle CEA \cong \triangle KEA$



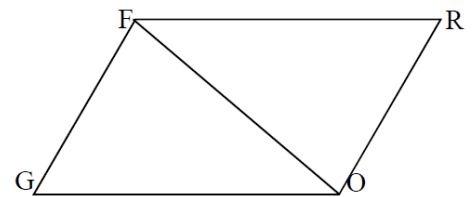
Statements

Reasons

### Level Five

- 1) Given:  $\overline{GO} \cong \overline{RO}$   
 $\angle GOF \cong \angle RFO$

Prove:  $\overline{FG} \parallel \overline{RO}$



Statements

Reasons