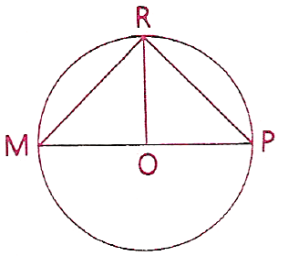
Name: _____

8.2.D1 ~ CPCTC & Circles

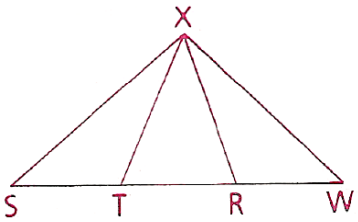
Past due on: _____ Period _____

PROOFS MUST BE DONE ON PROOF PAPER.

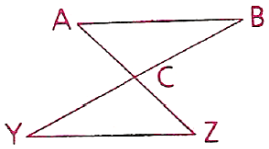
1. Given: $\odot O$
   $\overline{RO} \perp \overline{MP}$
   Prove: $\overline{MR} \cong \overline{PR}$



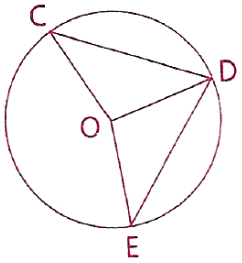
2. Given: T and R trisect $\overline{SW}$
   $\overline{XS} \cong \overline{XW}$
   $\angle S \cong \angle W$
   Prove: $\overline{XT} \cong \overline{XR}$



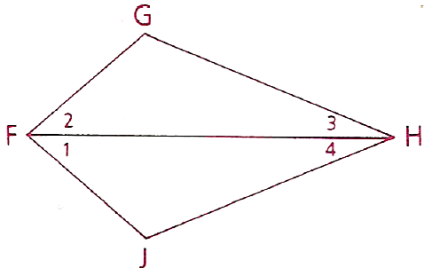
3. Given: $\angle B \cong \angle Y$
   C is the midpoint of $\overline{BY}$
   Prove: $\overline{AB} \cong \overline{ZY}$



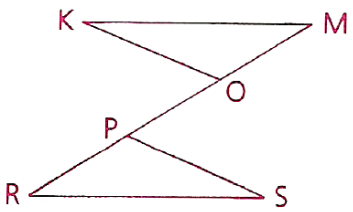
4. Given: $\odot O$
   $\overline{CD} \cong \overline{ED}$
   Prove: $\angle COD \cong \angle EOD$



5. Given: $\overleftrightarrow{FH}$ bisects $\angle GFJ$ and $\angle GHJ$
   Prove: $\overline{FG} \cong \overline{FJ}$



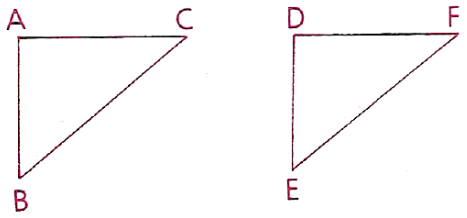
6. Given: $\angle M \cong \angle R$
   $\angle RPS \cong \angle MOK$
   $\overline{MP} \cong \overline{RO}$
   Prove: $\overline{KM} \cong \overline{SR}$



PROBLEMS 7 – 10 ARE NOT PROOFS.

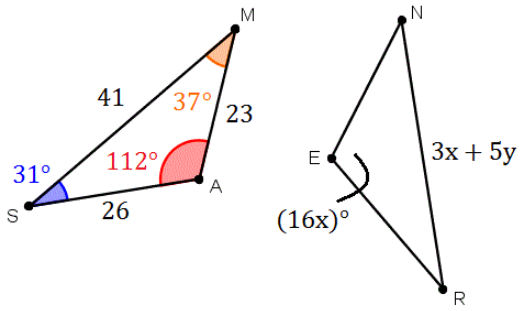
7. $\triangle ABC \cong \triangle DEF$,
$m\angle A = 90$, $m\angle B = 50$, $m\angle C = 40$,
$m\angle E = 12x + 30$, $m\angle F = {}^{1}/_{2}\,y - 10$, $m\angle D = \sqrt{z}$

Solve for x, y, and z.



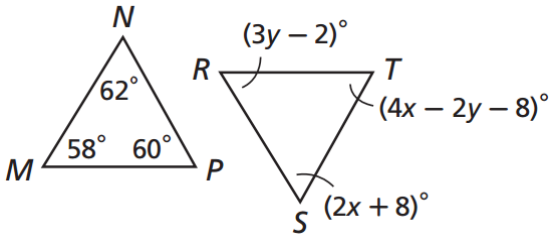
8. $\triangle SAM \cong \triangle REN$

Solve for x and y



9. $\triangle MNP \cong \triangle RST$

Solve for x and y



10. $\triangle MNP \cong \triangle QNP$, $y = 3$

Show and explain how the triangles are congruent.