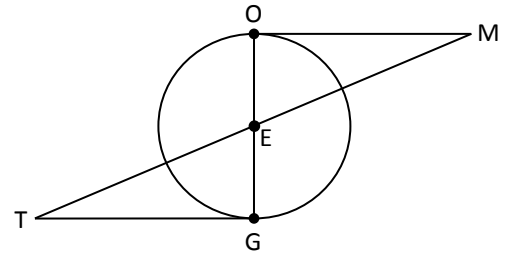


11-13 HW Worksheet Using Circle Properties in Proofs



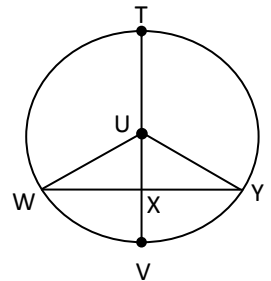
Problem A

If $\odot E$ has tangents \overline{OM} and \overline{TG} at O and G, explain why

- 1) $\overline{OM} \perp \overline{OE}$ and $\overline{TG} \perp \overline{GE}$ _____
- 2) $\angle EOM$ & $\angle EGT$ are right angles _____
- 3) $\angle EOM \cong \angle EGT$ _____
- 4) $\overline{EO} \cong \overline{EG}$ _____
- 5) $\angle OEM \cong \angle GET$ _____
- 6) $\triangle OEM \cong \triangle GET$ by (check all which apply): SSS SAS ASA AAS RHL

Problem B

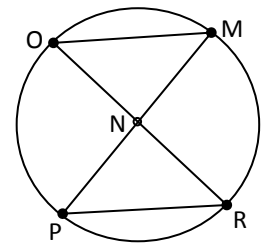
If $\odot U$ has diameter \overline{TUXV} that bisects \overline{WY} , explain why



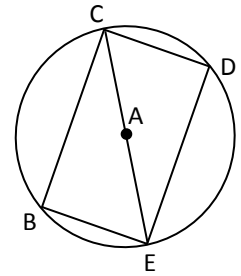
- 1) $\overline{WX} \cong \overline{YX}$ _____
- 2) $\overline{UW} \cong \overline{UY}$ _____
- 3) $\triangle WUX \cong \triangle YUX$ by (check all which apply): SSS SAS ASA AAS RHL
- 4) $\angle WUX \cong \angle YUX$ _____
- 5) Triangle WUY is isosceles _____

Problem C

If $\odot N$ with diameters \overline{OR} & \overline{NP} intersecting at N, explain why



- 1) $\overline{ON} \cong \overline{NR}$ _____
- 2) $\angle ONM \cong \angle RNP$ _____
- 3) $\overline{OM} \cong \overline{RP}$ _____
- 4) $\widehat{OMR} \cong \widehat{RPO}$ _____
- 5) $\triangle NMO \cong \triangle NPR$ by (check all which apply): SSS SAS ASA AAS RHL

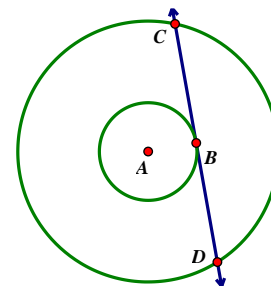
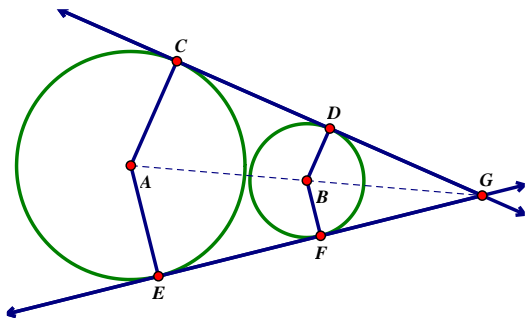


Problem D

If diameter \overline{CE} in $\odot A$; $CD \cong BE$, explain why

- 1) $\overline{CD} \cong \overline{BE}$ _____
- 2) $\overline{CB} \parallel \overline{DE}$ _____
- 3) $\angle BCE \cong \angle DEC$ _____
- 4) \overline{CAE} is a diameter _____
- 4) $\angle BCE$ and $\angle DEC$ are right angles _____
- 5) $\angle CBE \cong \angle EDC$ _____
- 6) $\triangle BCE$ is a right triangle _____

Problem E - Fill in the following congruency or similarity statements and specify which criteria is met:



$\triangle ACG \cong \triangle$ _____ by (check all which apply):
SSS SAS ASA AAS RHL

$\triangle ACB \cong \triangle$ _____ by (check all which apply):
SSS SAS ASA AAS RHL

$\triangle ACG \sim \triangle$ _____ by (check all which apply):
SSS SAS AA

Problem F:

Given Parallelogram BCDE with diagonal \overline{CE} in $\odot A$, it could also be proven that BCDE is a _____ because _____.

