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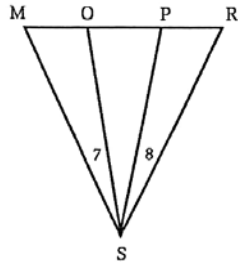
Congruent Triangles (ch 3) Mixed Practice

Date _____

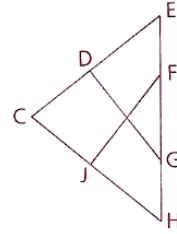
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Directions: Complete each of the problems. Ignore the numbering, the problems are mixed up to allow for room to write and keep it to one page. (The evens are from the chapter 3 review in the text. See those pages if something is difficult to read.) This is **due at the end of the period**. You may work together, use notes, and your text. Please do your own work, and do not allow another to copy yours. This will be graded. Each problem is 5 points. Proof might - might - be awarded extra credit for organization, marking diagrams, and chronology. **USE PENCIL!**

- 1 Given: $\angle 7 \cong \angle 8$
 $\angle M \cong \angle R$
 Conclusion: $\triangle MOS \cong \triangle RPS$

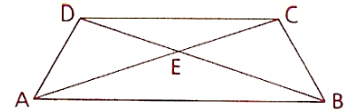


- 6 Given: $\overline{DG} \cong \overline{JF}$,
 $\overline{DE} \cong \overline{JH}$,
 $\overline{EG} \cong \overline{HF}$
 Prove: $\triangle HCE$ is isosceles.

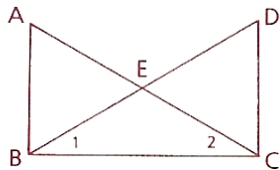


3. In $\triangle RQP$, $RP > QP > RQ$. Order the angles from largest to smallest:

- 12 Given: $\overline{AD} \cong \overline{BC}$,
 $\angle DAB \cong \angle CBA$
 Prove: $\triangle ABE$ is isosceles.

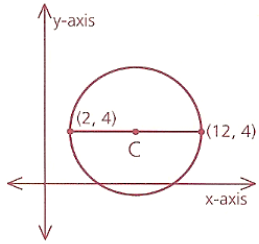


- 2 Given: $\overline{AB} \perp \overline{BC}$,
 $\overline{DC} \perp \overline{BC}$,
 $\angle 1 \cong \angle 2$
 Conclusion: $\overline{AC} \cong \overline{DB}$



10) Use the diagram below, and complete the table.

Find the...	Area	Circumference
Exact		
Estimated to nearest tenth		



16 Given: $\triangle NEW \cong \triangle CAR$, $EN = 11$, $AR = 2x - 4y$, $NW = x + y$,
 $CA = 4x + y$, $EW = 10$
 Draw the triangles and find CR.

8 Given: $\triangle RST \cong \triangle DFE$, $\angle R = 50^\circ$, $\angle T = 40^\circ$, $\angle E = (y + 10)^\circ$,
 $\angle S = 90^\circ$, $\angle D = (x + 20)^\circ$, $\angle F = (z - 30)^\circ$

Find: The values of x , y , and z (Draw your own diagram for this problem.)

15.

Given: $\angle 1 \cong \angle 2$
 $\overline{NO} \cong \overline{PO}$

Conclusion: \overline{RO} bisects $\angle NRP$.

