1. Name a right triangle.

2. Draw and identify a triangle with angle measures of $45^{\circ}, 45^{\circ}$, and $90^{\circ}$.
3. Find the value of $x$.

4. Find the value of $x$.

5. $\Delta \mathrm{J} \mathrm{KL}$ is isosceles with vertex $\angle \mathrm{J}$. Find the $\mathrm{m} \angle \mathrm{K}$ if the $\mathrm{m} \angle \mathrm{J}=42$.
6. Find the measure of the interior angles to the nearest tenth. (Drawing is not to scale.)

7. Find the measure of $\angle A$ below.

8. Find the measures of angles $A, B$, and $C$.

9. Use the figure below to find the measure of each angle.

10. If $\angle P \cong \angle Q$ and $m \angle Q=67^{\circ}$, then $m \angle P=$ $\qquad$ .
11. If $\triangle R P Q \cong \triangle J K L$, then $\overline{L J} \cong$ $\qquad$ .
12. Given: $\triangle L M N \cong \triangle U V W$. Complete the statements.
A. $\overline{U W} \cong$ $\qquad$ B. $\angle L M N \cong$
13. The two triangle-shaped gardens are congruent. Find the missing side lengths and angle measures.

14. In the diagram, $\triangle \mathrm{ABC} \cong \Delta$ FED Find the value of $x$.

15. State the postulate(s) or theorem(s) that can be used to conclude that $\triangle O C D \cong \triangle O A B$.


B
16. What must be true in order for $\triangle A B C \cong \triangle E D C$ by the SAS Congruence Postulate?

17. Refer to the figure below.
$\triangle A B C \cong$ $\qquad$ by $\qquad$ or $\qquad$

18. Solve for $x$ and $y$.

19. In $\triangle A B C$, if $\overline{A B} \cong \overline{B C}$ and $m \angle A=39^{\circ}$, then $m \angle C=$ $\qquad$ .
20. Find the values of $x$ and $y$.

21. Use information in the figure below to find $m \angle$ D.

25. Given: $\angle D C A \cong \angle B C A, \angle B \cong \angle D$

Prove: $\overline{A B} \cong \overline{A D}$

23. Given that $\overline{T V} \cong \overline{W V}$, determine what additional information is needed to prove the triangles are congruent by SAS.

24. Given: $\overline{B D}$ bisects $\angle A B C, \overline{A B} \cong \overline{B C}$

Prove: $\overline{A D} \cong \overline{C D}$


