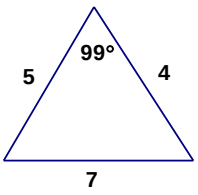
# Geometry Chapter 4 Practice Test 1

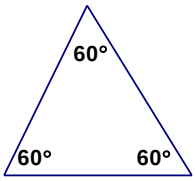
Name _____

Consider each of the triangles below. Circle all that apply to the triangle.

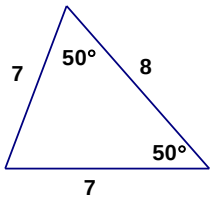
Triangle 1



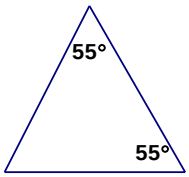

Triangle 2



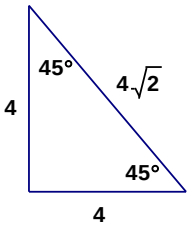

Triangle 3



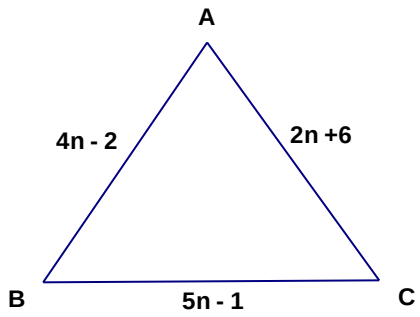

Triangle 4

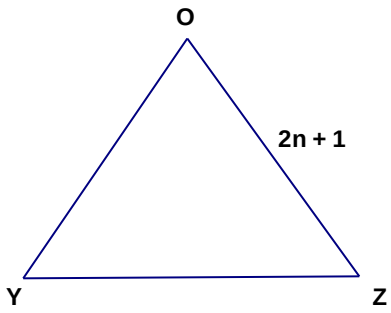



Triangle 5




| | | | | | | |
|---|---|---|---|---|---|---|
| 1. | Acute | Obtuse | Right | Scalene | Isosceles | Equilateral |
| 2. | Acute | Obtuse | Right | Scalene | Isosceles | Equilateral |
| 3. | Acute | Obtuse | Right | Scalene | Isosceles | Equilateral |
| 4. | Acute | Obtuse | Right | Scalene | Isosceles | Equilateral |
| 5. | Acute | Obtuse | Right | Scalene | Isosceles | Equilateral |




$\Delta ABC$ above is an isosceles triangle with $\overline{AB} \cong \overline{AC}$. $\Delta OYZ$ is an equilateral triangle.

_____7. What is AB?

_____8. What is AC?

_____9. What is BC?

_____ 10. If the perimeter of $\Delta OYZ$ is 39 cm, what is the value of n?

Given that $\Delta NOP \cong \Delta BXD$, complete the statements below.

11. $\overline{OP} \cong$_____ 12. $\angle B \cong$_____ 13. $\overline{PN} \cong$_____

_____ 14. If $\Delta RST \cong \Delta HIJ, \angle R = 80°, \angle I = 2x + 10°,$ and $\angle J = 80°$, what is the value of x?

_____ 15. If $\Delta ABC \cong \Delta XYZ$, which of the following must be true?
A. $\angle A = \angle Z$ B. AC = XY C. CA = ZX D. XZ = BC

**Figure 1**

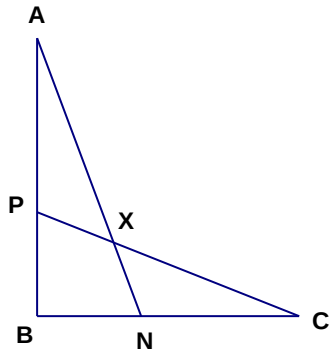



**Figure 2**

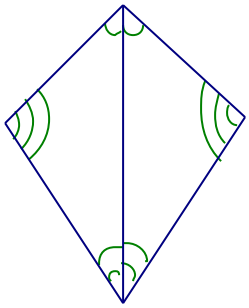
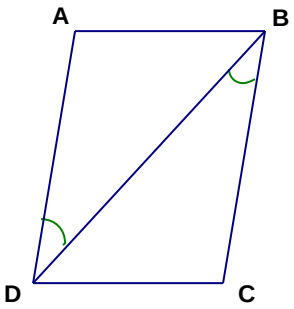


**Figure 3**




_____ 16. In figure 1, $\overline{AB} \cong \overline{CB}$ and $\overline{BN} \cong \overline{BP}$.
Which could be used to prove that $\Delta BNA \cong \Delta BPC$?
A. AAS B. SAS C. ASA D. SSS

_____ 17. In figure 2, what can you use to prove that the two triangles are congruent?
A. SAS B. AAA C. ASA D. SSS

_____ 18. In figure 3, what else must you know to prove that the triangles are congruent by SAS?
A. $\overline{AD} \cong \overline{BC}$ B. $\overline{AD} \cong \overline{BA}$ C. $\overline{CD} \cong \overline{BC}$ D. $\overline{AB} \cong \overline{BC}$

19. Circle the ones below that do not prove congruency of triangles.

SSS AAA SAS AAS SSA ASA

_____ 20. Find the equation of the line, in slope intercept form, that goes through the point (4, 2) and has a slope of -3.

_____ 21. Find the equation of the line, in slope intercept form, that goes through the point (1, 3) and (3, 13).

_____ 22. Give the equation of the line, in slope intercept form, that is parallel to y = 2x – 1 and passes through the point (1, 8).