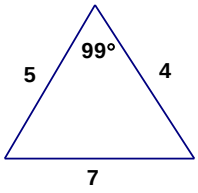
Geometry Chapter 4 Practice Test 1

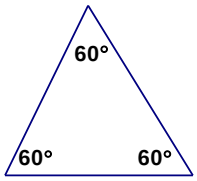
Name: _____ Time› Start: _____ Finish: _____ Total Time = _____

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

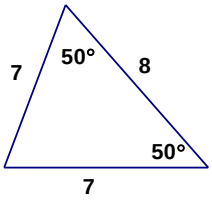
Triangle 1



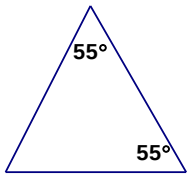
Triangle 2



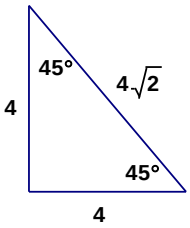
Triangle 3



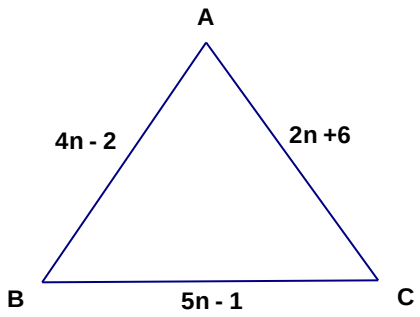
Triangle 4

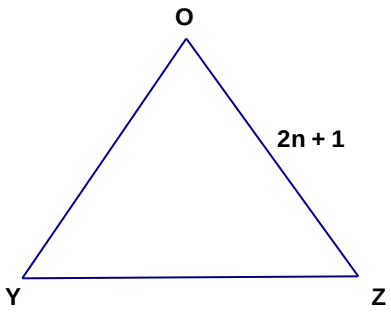


Triangle 5



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





ΔABC above is an isosceles triangle with $\overline{AB} \cong \overline{AC}$. ΔOYZ is an equilateral triangle.

_____7. What is AB?

_____8. What is AC?

_____9. What is BC?

_____ 10. If the perimeter of ΔOYZ 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

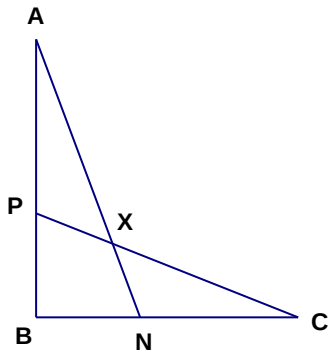


Figure 2

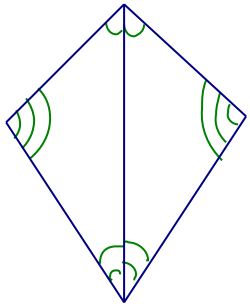
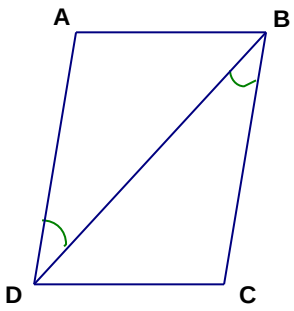


Figure 3



_____ 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. R, S, and T are the verticies of one triangle. E, F, and D are the verticies of another triangle. $\angle R = 60°, \angle S = 80°, \angle F = 60°, \angle D = 40°, RS = 7,$ and $EF = 7$
Which postulate would let you conclude that the two triangles are congruent?

A. ASA B. SSS C. AAS D. SAS