

Geometry Chapter 4 Practice Test 1

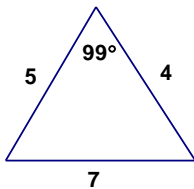
Name: _____

Time Start: _____ Finish: _____

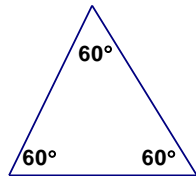
Total Time = _____

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

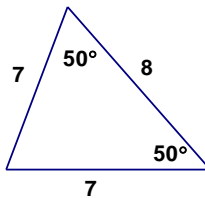
Triangle 1



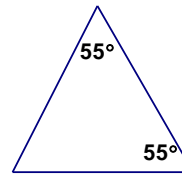
Triangle 2



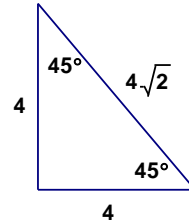
Triangle 3



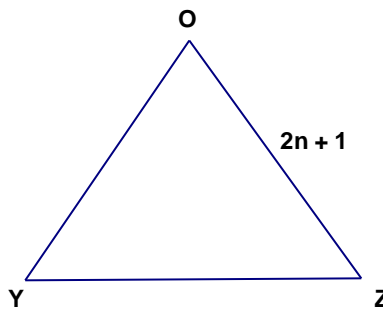
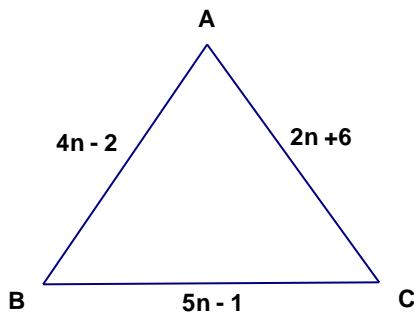
Triangle 4



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 |



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

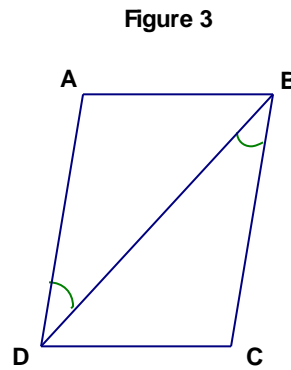
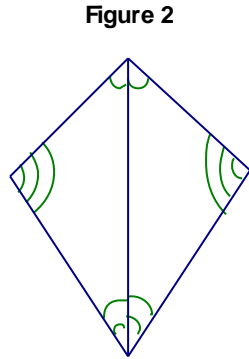
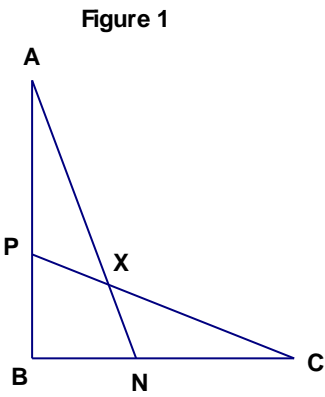
- _____ 6. What is AB?
- _____ 7. What is AC?
- _____ 8. What is BC?
- _____ 9. If the perimeter of $\triangle OYZ$ is 39 cm, what is the value of n?

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

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

_____ 13. If $\triangle RST \cong \triangle HIJ$, $\angle R = 80^\circ$, $\angle I = 2x + 10^\circ$, and $\angle J = 80^\circ$, what is the value of x ?

_____ 14. If $\triangle ABC \cong \triangle XYZ$, which of the following must be true?
 A. $\angle A = \angle Z$ B. $AC = XY$ C. $CA = ZX$ D. $XZ = BC$



_____ 15. In figure 1, $\overline{AB} \cong \overline{CB}$ and $\overline{BN} \cong \overline{BP}$. Which could be used to prove that $\triangle BNA \cong \triangle BPC$?
 A. AAS B. SAS C. ASA D. SSS

_____ 16. In figure 2, what can you use to prove that the two triangles are congruent?
 A. SAS B. AAA C. ASA D. SSS

_____ 17. 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. $\overline{AB} \cong \overline{BC}$

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

- SSS AAA SAS AAS SSA ASA

_____ 19. Find the equation of the line, in slope intercept form, that goes through the point (4, 2) and has a slope of -3.

_____ 20. Find the equation of the line, in slope intercept form, that goes through the point (1, 3) and (3, 13).

_____ 21. Give the equation of the line, in slope intercept form, that is parallel to $y = 2x - 1$ and passes through the point (1, 8).

_____ 22. What is the slope of the line perpendicular to $2x + 4y = 10$?

_____ 23. What is the slope of the line perpendicular to $x - 4y = -8$?