

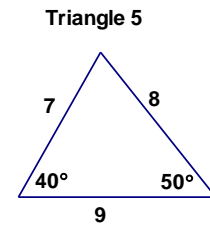
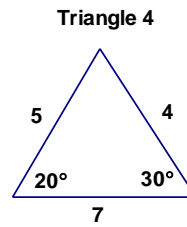
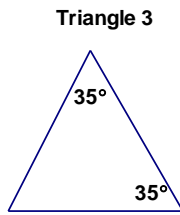
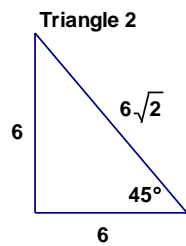
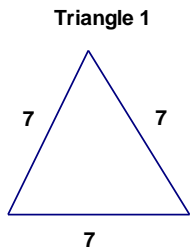
# Geometry Chapter 4 Practice Test 2

Name: \_\_\_\_\_

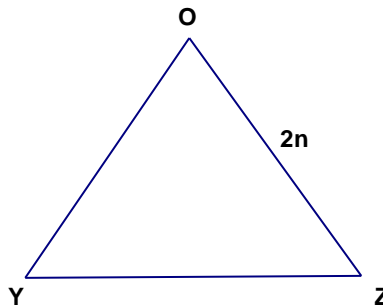
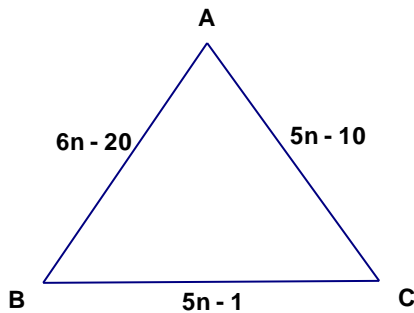
Time Start: \_\_\_\_\_ Finish: \_\_\_\_\_

Total Time = \_\_\_\_\_

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



- |    |       |        |       |         |           |             |
|----|-------|--------|-------|---------|-----------|-------------|
| 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 36 cm, what is the value of n?

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

10.  $\overline{XD} \cong$  \_\_\_\_\_

11.  $\angle X \cong$  \_\_\_\_\_

12.  $\overline{PO} \cong$  \_\_\_\_\_

Figure 1

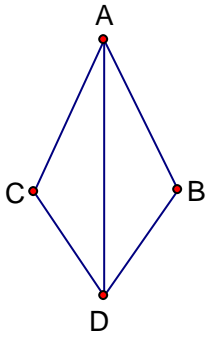


Figure 2

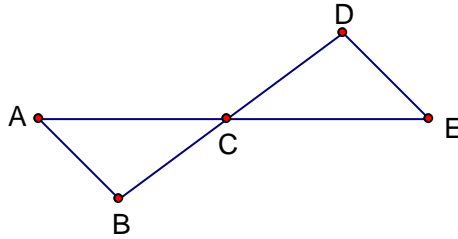


Figure 3

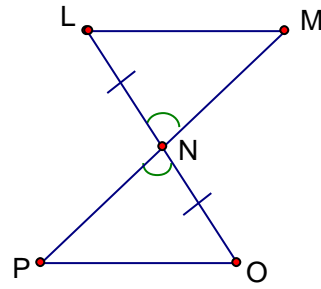


Figure 4

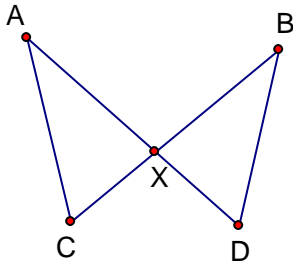


Figure 5

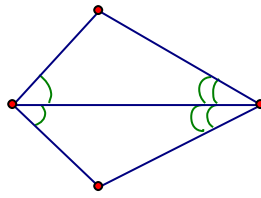
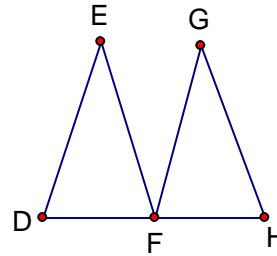
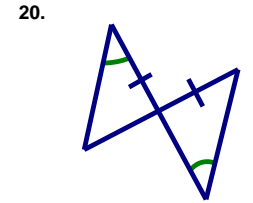
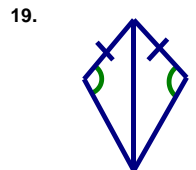
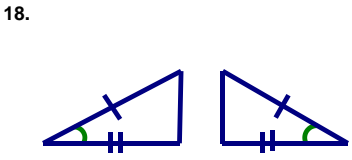
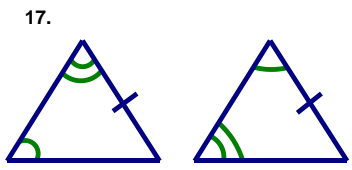
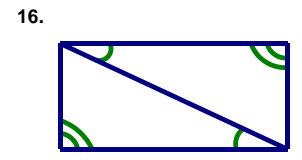
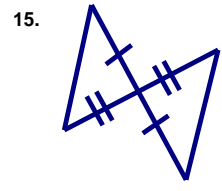
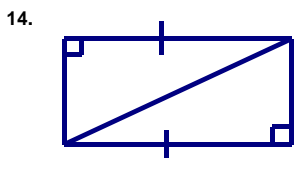
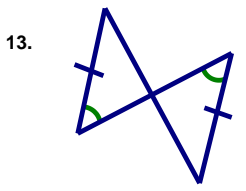
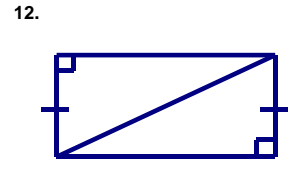
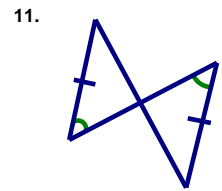
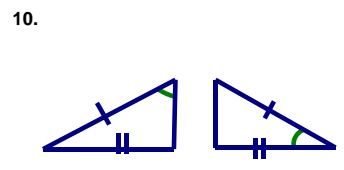
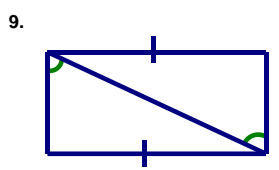
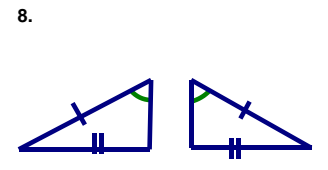
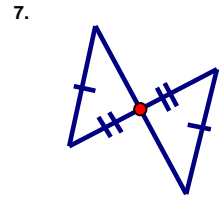
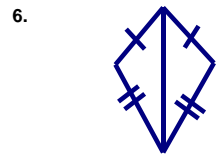
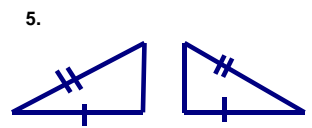
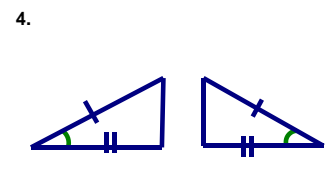
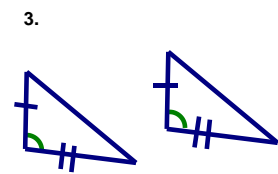
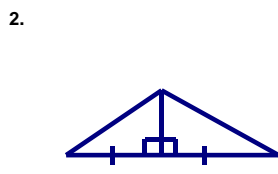
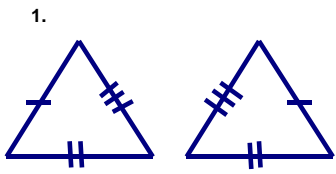


Figure 6



- \_\_\_\_\_ 13. In figure 1 above, what postulate would be used to prove that  $\triangle ABD \cong \triangle ACD$  if  $\overline{AC} \cong \overline{AB}$  and  $\overline{CD} \cong \overline{BD}$ ?
- \_\_\_\_\_ 14. In figure 2 above,  $\overline{AE}$  and  $\overline{BD}$  bisect each other at point C. What postulate would be used to prove that  $\triangle ABC \cong \triangle EDC$ ?
- \_\_\_\_\_ 15. In figure 3 above, what additional information is needed to prove that  $\triangle MNL$  is congruent to  $\triangle PNO$  by ASA?
- \_\_\_\_\_ 16. In figure 4 above,  $AX = BX$  and  $CX = DX$ . What postulate would be used to prove that  $\triangle AXC \cong \triangle BXD$ ?
- \_\_\_\_\_ 17. In figure 5 above, what postulate would be used to prove that the triangles are congruent?
- \_\_\_\_\_ 18. In figure 6 above, which statement below does **NOT** necessarily describe the triangles shown if  $\triangle DEF \cong \triangle GFH$ ?
- |  |  |
|--|--|
| A. $\triangle EDF \cong \triangle GFH$ | C. $\triangle EFD \cong \triangle GHF$ |
| B. $\triangle FED \cong \triangle HGF$ | D. $\triangle FDE \cong \triangle FGH$ |
- \_\_\_\_\_ 19. What would be the slope of the line perpendicular to  $y = -5x - 6$ ?
- \_\_\_\_\_ 20. What would be the slope of the line parallel to  $y = -2x - 6$ ?
- \_\_\_\_\_ 21. Give the equation of the line parallel to  $2x - 2y = 8$  and that goes through  $(1, 5)$
- \_\_\_\_\_ 22. Give the equation of the line that goes through  $(-2, 8)$  and is perpendicular to  $y = 2x - 1$ .

Decide whether you can use SSS, ASA, AAS, SAS, or HL to prove that the given triangles are congruent. If you can't prove congruency, write NP for "not possible."



1. \_\_\_\_\_ 2. \_\_\_\_\_ 3. \_\_\_\_\_ 4. \_\_\_\_\_ 5. \_\_\_\_\_ 6. \_\_\_\_\_ 7. \_\_\_\_\_  
 8. \_\_\_\_\_ 9. \_\_\_\_\_ 10. \_\_\_\_\_ 11. \_\_\_\_\_ 12. \_\_\_\_\_ 13. \_\_\_\_\_ 14. \_\_\_\_\_  
 15. \_\_\_\_\_ 16. \_\_\_\_\_ 17. \_\_\_\_\_ 18. \_\_\_\_\_ 19. \_\_\_\_\_ 20. \_\_\_\_\_