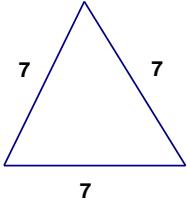


Geometry Chapter 4 Practice Test 2

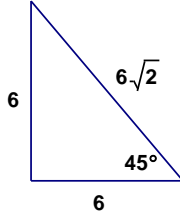
Name _____

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

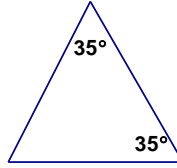
Triangle 1



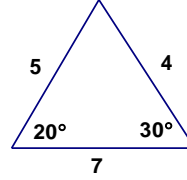
Triangle 2



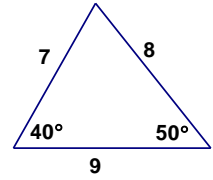
Triangle 3



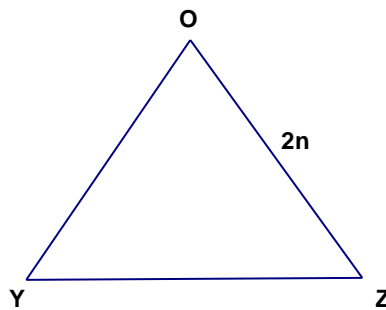
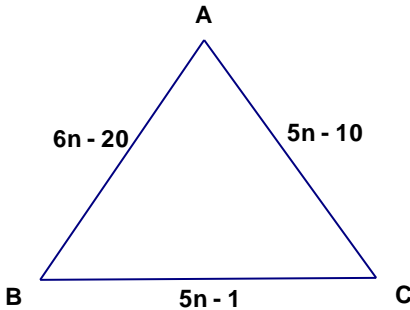
Triangle 4



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 |



$\triangle ABC$ 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

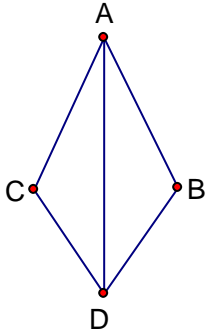


Figure 2

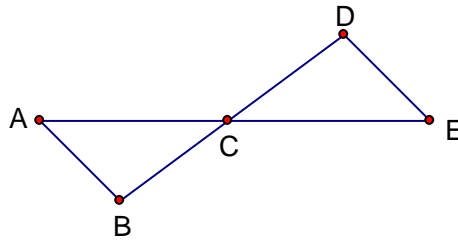


Figure 3

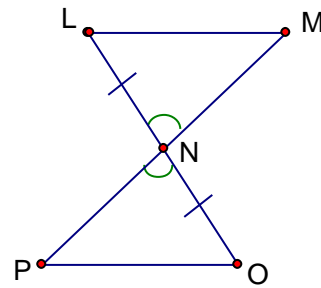


Figure 4

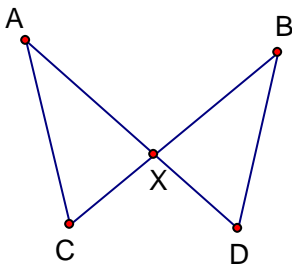


Figure 5

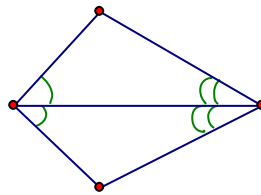
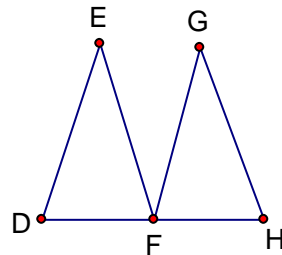


Figure 6



- _____ 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. $\triangle FDE \cong \triangle FHG$ |
- _____ 19. Find the equation of the line, in slope intercept form, that goes through the point (1, 5) and has a slope of -2.
- _____ 20. Find the equation of the line, in slope intercept form, that goes through the point (4, 3) and (3, 6).