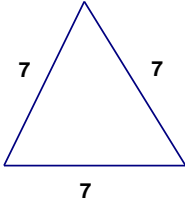# Geometry Chapter 4 Practice Test 2
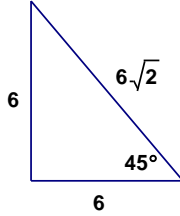
Name _____

Consider each of the triangles below. Circle all that apply to the triangle.
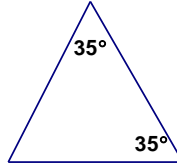
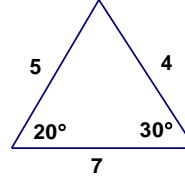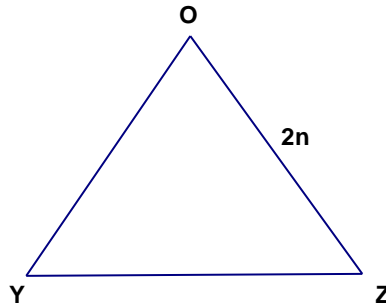| Triangle 1	Triangle 2	Triangle 3	Triangle 4	Triangle 5
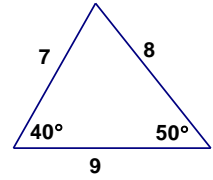
1.   Acute   Obtuse   Right   Scalene   Isosceles   Equilateral

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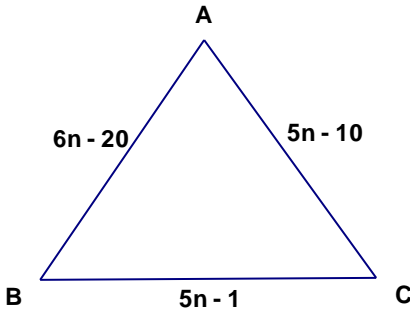
$\triangle ABC$ above is an isosceles triangle with $\overline{AB} \cong \overline{AC}$. $\triangle OYZ$ is an equilateral triangle.

_____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. $\overline{PO} \cong$ _____
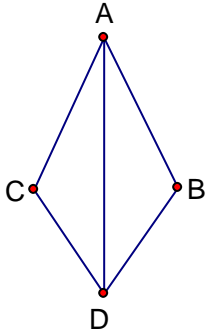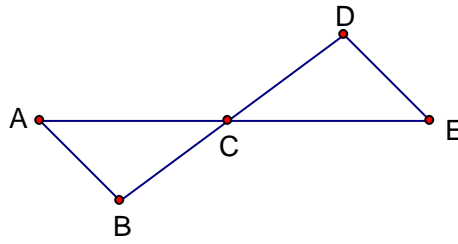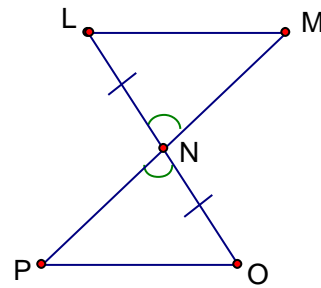
Figure 1

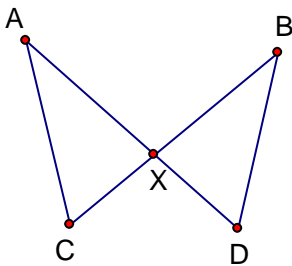**Figure 2**

Figure 3

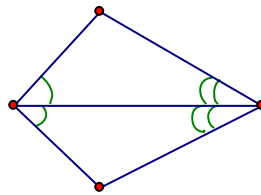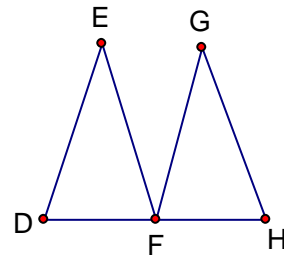**Figure 4**

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 $\triangle DEF \cong \triangle FGH$?
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).