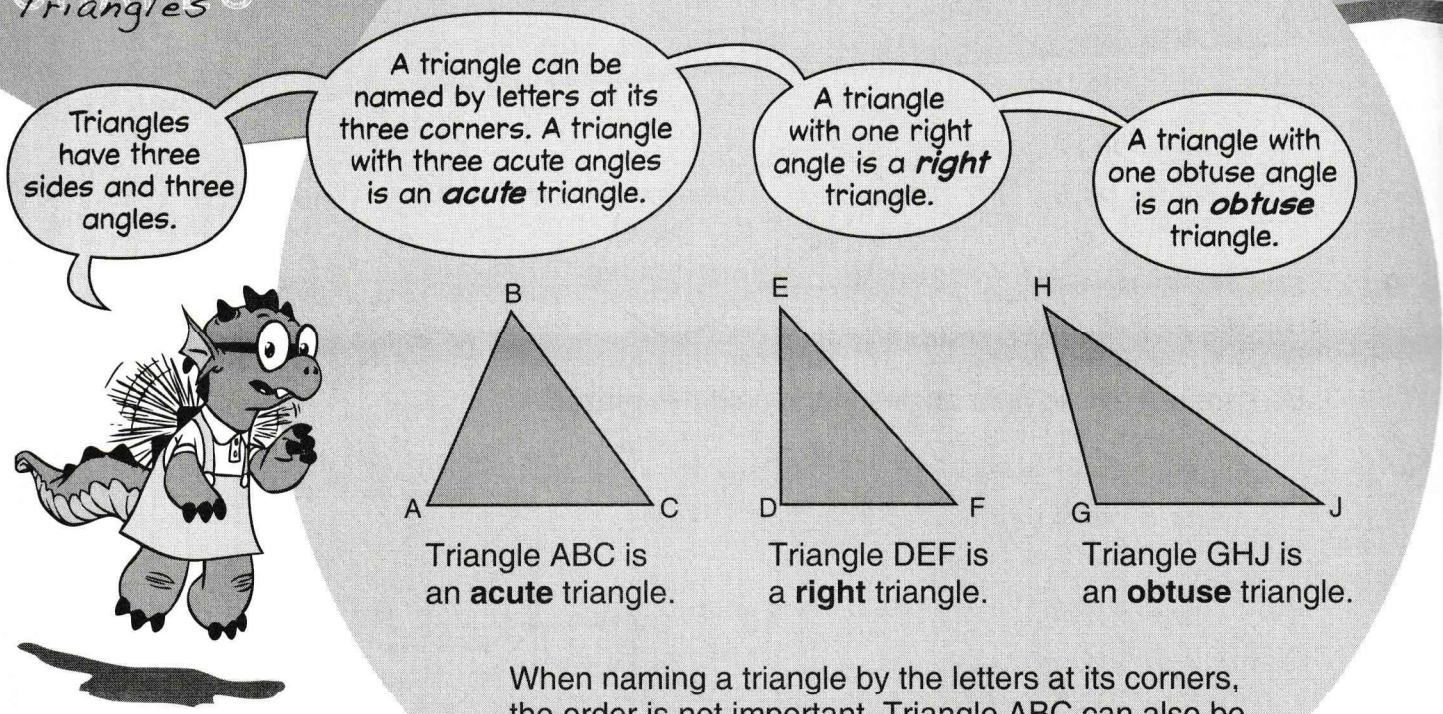


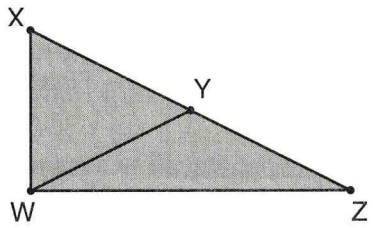
Triangle ABC is an **acute** triangle.

Triangle DEF is a **right** triangle.

Triangle GHJ is an **obtuse** triangle.

When naming a triangle by the letters at its corners, the order is not important. Triangle ABC can also be named triangle ACB, BAC, BCA, CAB, or CBA.

PRACTICE | Use the diagram below to answer the questions that follow.



13. Every triangle can be named six ways. Two ways to name the largest triangle in the diagram above are WXZ and WZX. What are the other four ways? **13.** _____ _____ _____ _____

14. Triangle WXZ is the largest triangle in the diagram above. Name the two smaller triangles in the diagram. **14.** _____ _____

15. Which of the three triangles in the diagram above is a right triangle? **15.** _____

16. Which of the three triangles in the diagram above is an acute triangle? **16.** _____

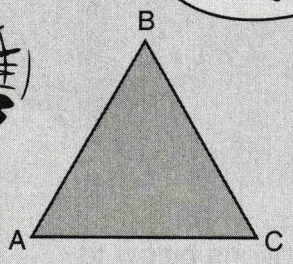
17. Which of the three triangles in the diagram above is an obtuse triangle? **17.** _____

Triangles can also be described by their sides.

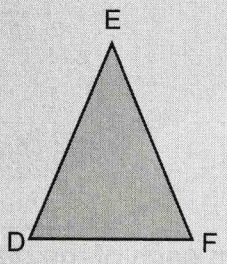
If all three sides are the same length, the triangle is an ***equilateral*** triangle.

A triangle with at least two equal side lengths is an ***isosceles*** triangle.

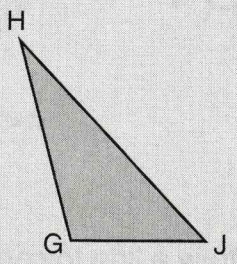
A triangle with no equal side lengths is a ***scalene*** triangle.



Triangle ABC is an **equilateral** triangle.

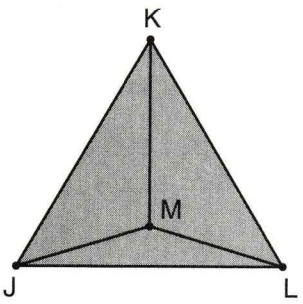


Triangle DEF is an **isosceles** triangle.



Triangle GHJ is a **scalene** triangle.

PRACTICE | Use the diagram below to answer the questions that follow.

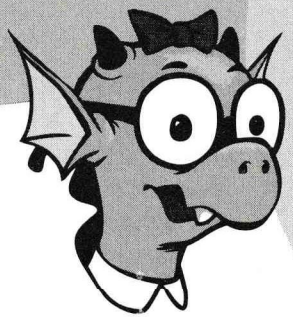


18. There are four different triangles in the diagram above. Name them all. **18.** _____ _____ _____ _____

19. Name the only equilateral triangle in the diagram above. **19.** _____

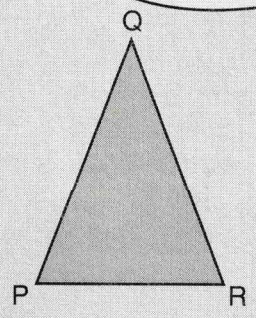
20. Name the two scalene triangles in the diagram above. **20.** _____ _____

21. There are two isosceles triangles in the diagram above. Name them both. (Remember, a triangle with ***at least*** two equal side lengths is isosceles.) **21.** _____ _____



Every triangle can be described by its sides and by its angles.

For example, triangle PQR is an ***isosceles acute*** triangle.



PRACTICE

Draw a line to connect each of the descriptions below to one of the drawings on the right. If a shape is impossible, connect it to the circle marked "Impossible".

22. An isosceles right triangle.

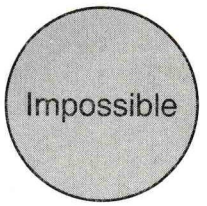
23. A scalene obtuse triangle.

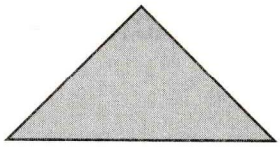
24. An isosceles obtuse triangle.

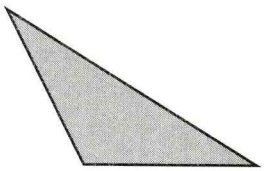
25. A scalene right triangle.

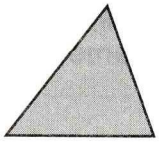
26. An equilateral right triangle.

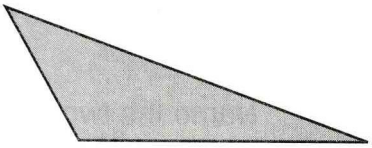
27. A scalene acute triangle.

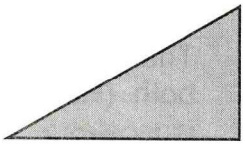






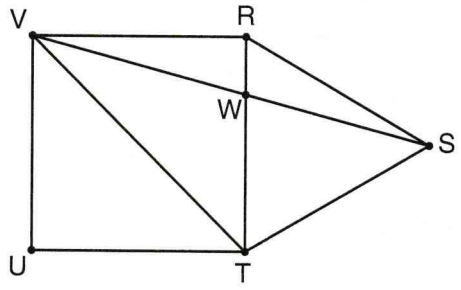






PRACTICE

In the diagram below, RTUV is a square.
Use the diagram to answer the questions that follow.



28. How many right triangles are in the diagram above? **28.** _____

29. Describe triangle TUV by its sides (equilateral, isosceles, or scalene) and by its angles (acute, right, or obtuse). **29.** _____

_____

30. Describe triangle RST by its sides (equilateral, isosceles, or scalene) and by its angles (acute, right, or obtuse). **30.** _____

_____

31. Describe triangle STW by its sides (equilateral, isosceles, or scalene) and by its angles (acute, right, or obtuse). **31.** _____

_____

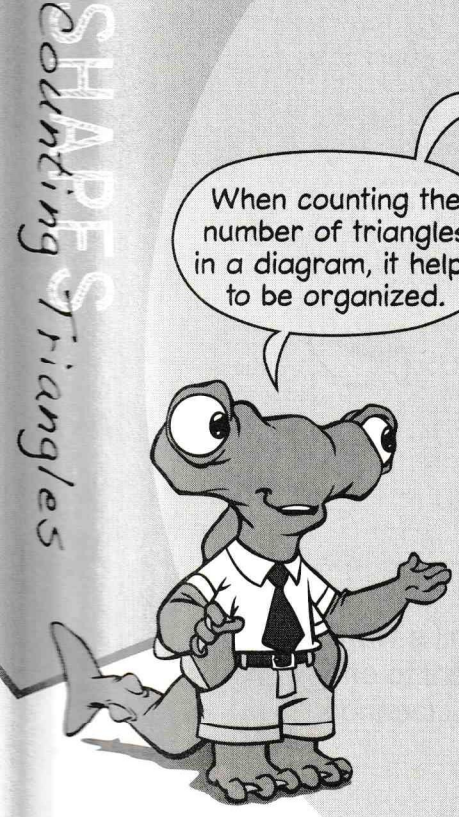
32. Name the only scalene right triangle in the diagram above. **32.** _____

33. Name the only isosceles obtuse triangle in the diagram above. **33.** _____

34. ★ Name all three scalene obtuse triangles in the diagram above. **34.** _____

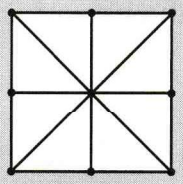
_____

_____

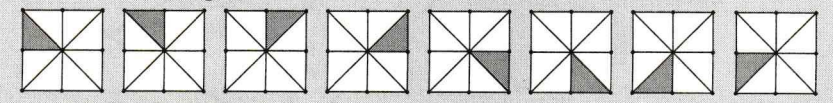


EXAMPLE

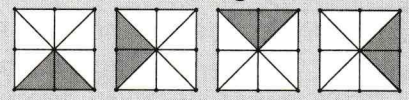
How many triangles of any size can be traced in the diagram below?



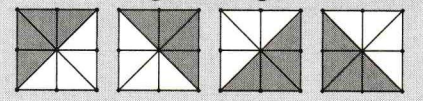
There are
8 small triangles,



4 medium triangles,



and 4 large triangles.

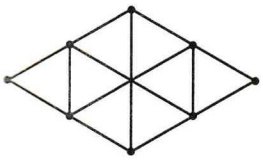


So, there are a total of
$8+4+4=$ **16** triangles.

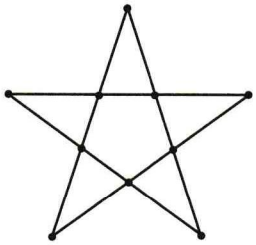
PRACTICE

Count the total number of triangles of any size that can be traced in each of the diagrams below.

35.



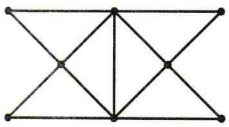
36.



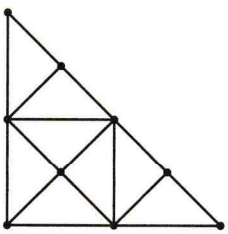
35. _____

36. _____

37. ★



38. ★



37. _____

38. _____