

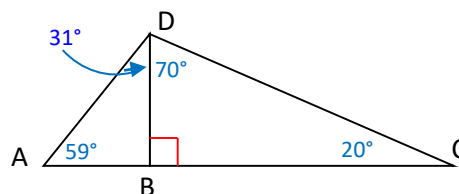
Name: _____

Classify Triangles

- In $\triangle JKL$, JK, KL, and JL are *equal*. How does this help you classify $\triangle JKL$ by its side lengths?
- $\triangle XYZ$ is an *obtuse triangle*. What can you say about the types of angles in $\triangle XYZ$?

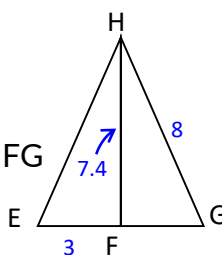
Classify each triangle by its angle measures.

3. $\triangle DBC$ 4. $\triangle ABD$ 5. $\triangle ADC$



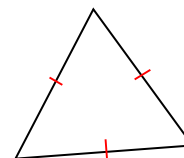
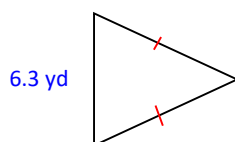
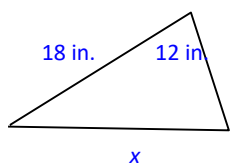
Classify each triangle by its side lengths.

6. $\triangle EGH$ 7. $\triangle EFH$ 8. $\triangle HFG$

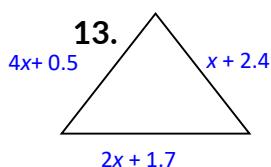
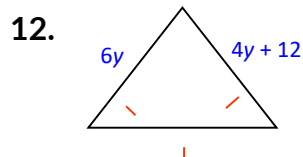


Classify each triangle by its side lengths.

9. $P = 49$ in. 10. $P = 22.5$ yd 11. $P = 84.3$ cm

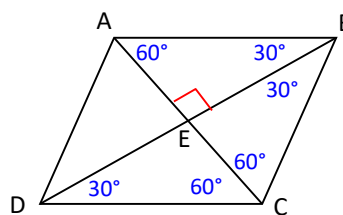


Find the side lengths of each triangle.



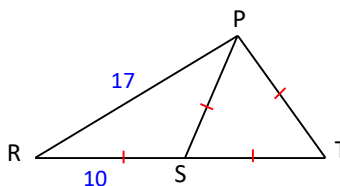
Classify each triangle by its angle measure.

- 14. $\triangle BEA$
- 15. $\triangle DBC$
- 16. $\triangle ABC$

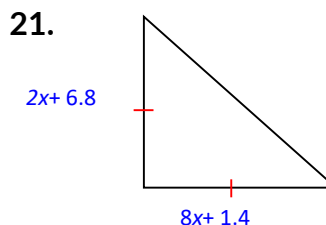
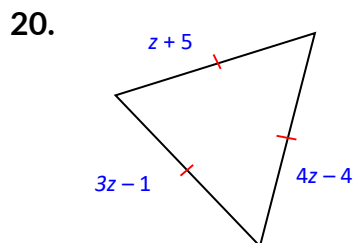


Classify each triangle by its side lengths.

- 17. $\triangle PST$
- 18. $\triangle RSP$
- 19. $\triangle RPT$



Find the side lengths of each triangle.



22. Draw a triangle large enough to measure. Label the vertices X, Y, and Z.

- a. Name the three sides and three angles of the triangle.
- b. Use a ruler and protractor to classify the triangle by its side length and angle measures.

23. The perimeter of a triangle is 29 millimeters. The length of the first side is twice the length of the second side. The length of the third side is 5 more than the length of the second side. Find the side lengths of the triangle.

Then classify the triangle by its side lengths.

Draw an example of each type of triangles or explain why it is not possible.

24. Isosceles right

25. Equiangular obtuse

26. Scalene right

27. Equilateral acute

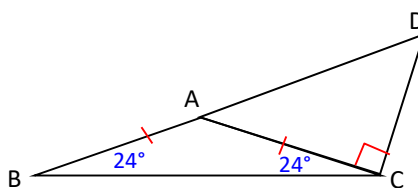
28. Scalene equiangular

29. Isosceles acute

30. An equilateral triangle has a perimeter of 105 in. What is the length of each side of the triangle?

Classify each triangle by its angles and sides.

31. $\triangle ABC$



32. $\triangle ACD$

33. An isosceles triangle has a perimeter of 34 cm. The congruent sides measure $(4x - 1)$ cm. The length of the third side is x cm. What is the value of x ?