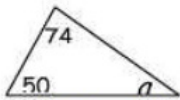


Angles in triangles:

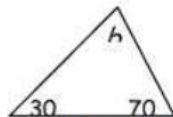
- ◆ The sum of the interior angles is 180° .
- ◆ The exterior angle of a triangle is equal to the sum of the remote interior angles.

1. $a = 56^\circ$



$74 + 50 + a = 180$
 $124 + a = 180$
 $a = 56$

2. $h = 80^\circ$



$30 + 70 + h = 180$
 $100 + h = 180$
 $h = 80$

3. $b = 70^\circ$



$30 + 40 + x = 180$
 $70 + x = 180$
 $x = 110$

Triangles by Angles

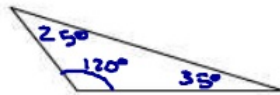
Acute Triangles

- ◆ All angles are less than 90°



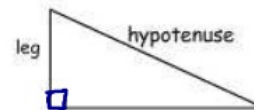
Obtuse Triangles

- ◆ Exactly one angle is greater than 90°



Right Triangles

- ◆ Exactly one angle is 90° .



Triangles by Sides

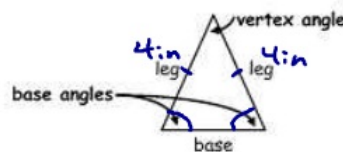
Scalene Triangle

- ◆ No congruent sides



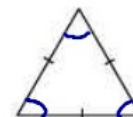
Isosceles Triangles

- ◆ Two congruent sides
- ◆ Base angles are congruent



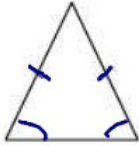
Equilateral Triangles

- ◆ Three congruent sides.
- ◆ Three congruent angles.

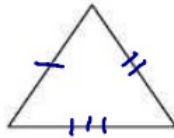


Name Each Triangle by its Angles and by its Sides.

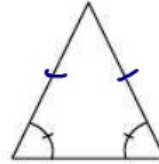
a. acute isosceles



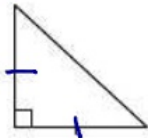
b. acute scalene



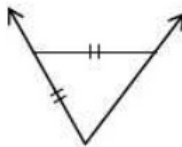
c. acute Isosceles.



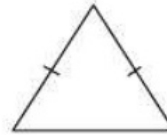
d. right isosceles.



e. acute Isosceles

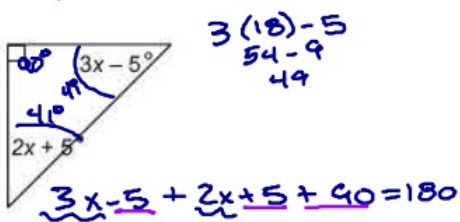


f. acute isosceles.



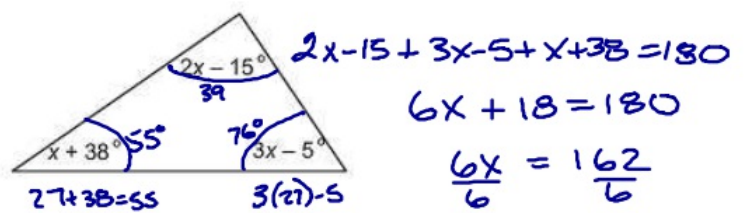
Name the following triangles by their Angles and Sides then solve for x.

g. Right Scalene.



$$\begin{array}{r}
 5x + 90 = 180 \\
 -90 \quad -90 \\
 \hline
 5x = 90 \\
 x = 18
 \end{array}$$

h. Acute Scalene.

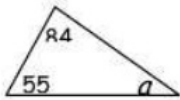


$$x = 27$$

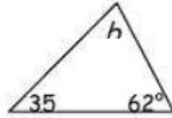
Name the Triangle by its angle and side and Find the indicated missing measures.

Show your work!

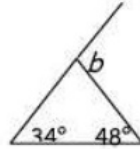
1. _____



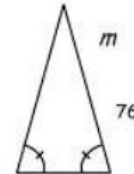
2. _____



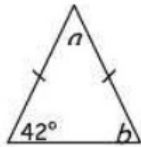
3. _____



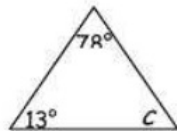
4. _____



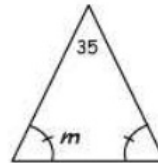
5. _____



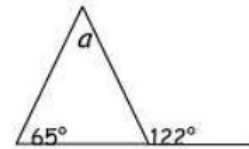
6. _____



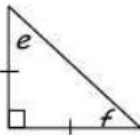
7. _____



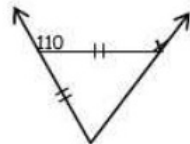
8. _____



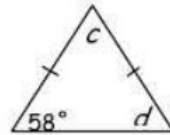
9. _____



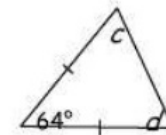
10. _____



11. _____

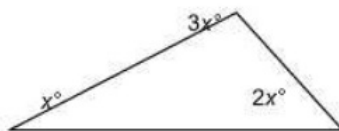


12. _____

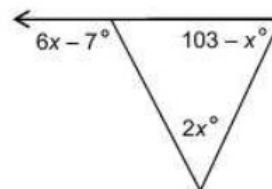


Solve for x .

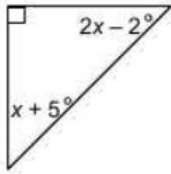
13. _____



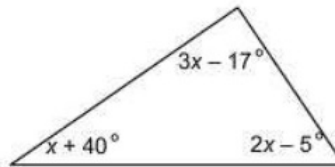
14. _____



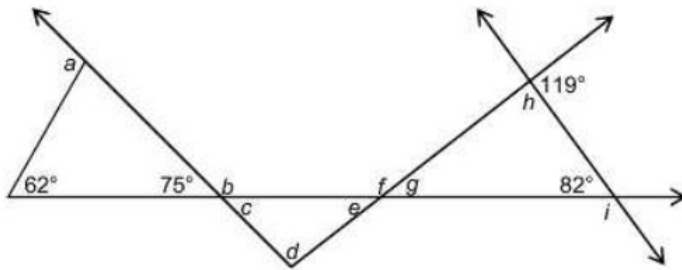
15. _____



16. _____



17. Solve for each missing angle measure.



$a =$ _____ $f =$ _____

$b =$ _____ $g =$ _____

$c =$ _____ $h =$ _____

$d =$ _____ $i =$ _____

Review:

Evaluate each function.

$f(x) = 2x - 1$

$g(x) = 2^x - 1$

18. $f(5)$

19. $g(5)$

20. $f(-1)$

21. $g(-1)$

22. $f(0)$

23. $g(0)$

24. $\frac{f(5)}{3}$

25. $3[g(5)]$

26. $f(-1) + g(-1)$