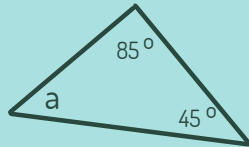


Angles in Triangles

Example

The sum of angles in a triangle is 180°



$$a + 85^\circ + 45^\circ = 180^\circ$$

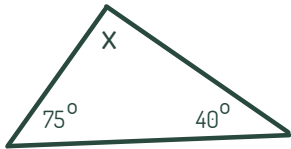
$$a + 130^\circ = 180^\circ$$

$$a = 180^\circ - 130^\circ$$

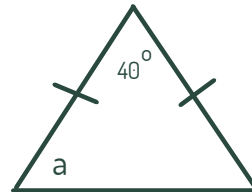
$$a = 50^\circ$$

Find the size of the unknown angles in each figure!

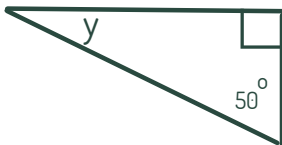
1.



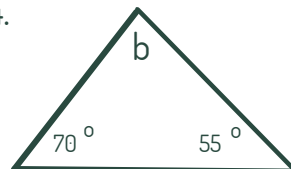
3.



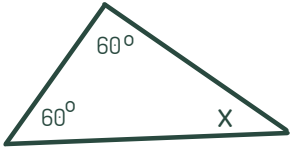
2.



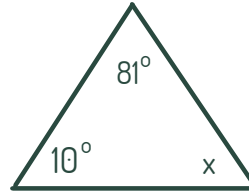
4.



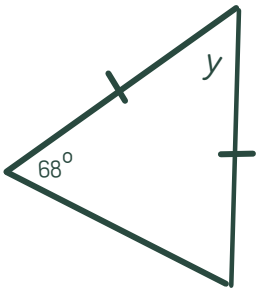
5.



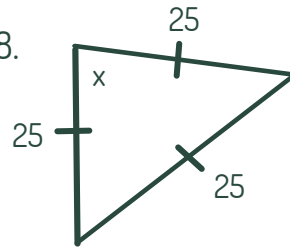
6.



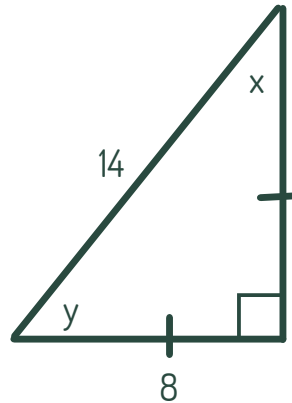
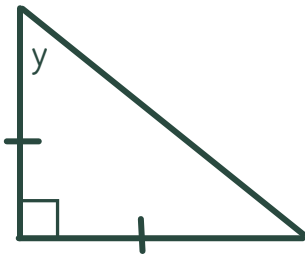
7.



8.



9.

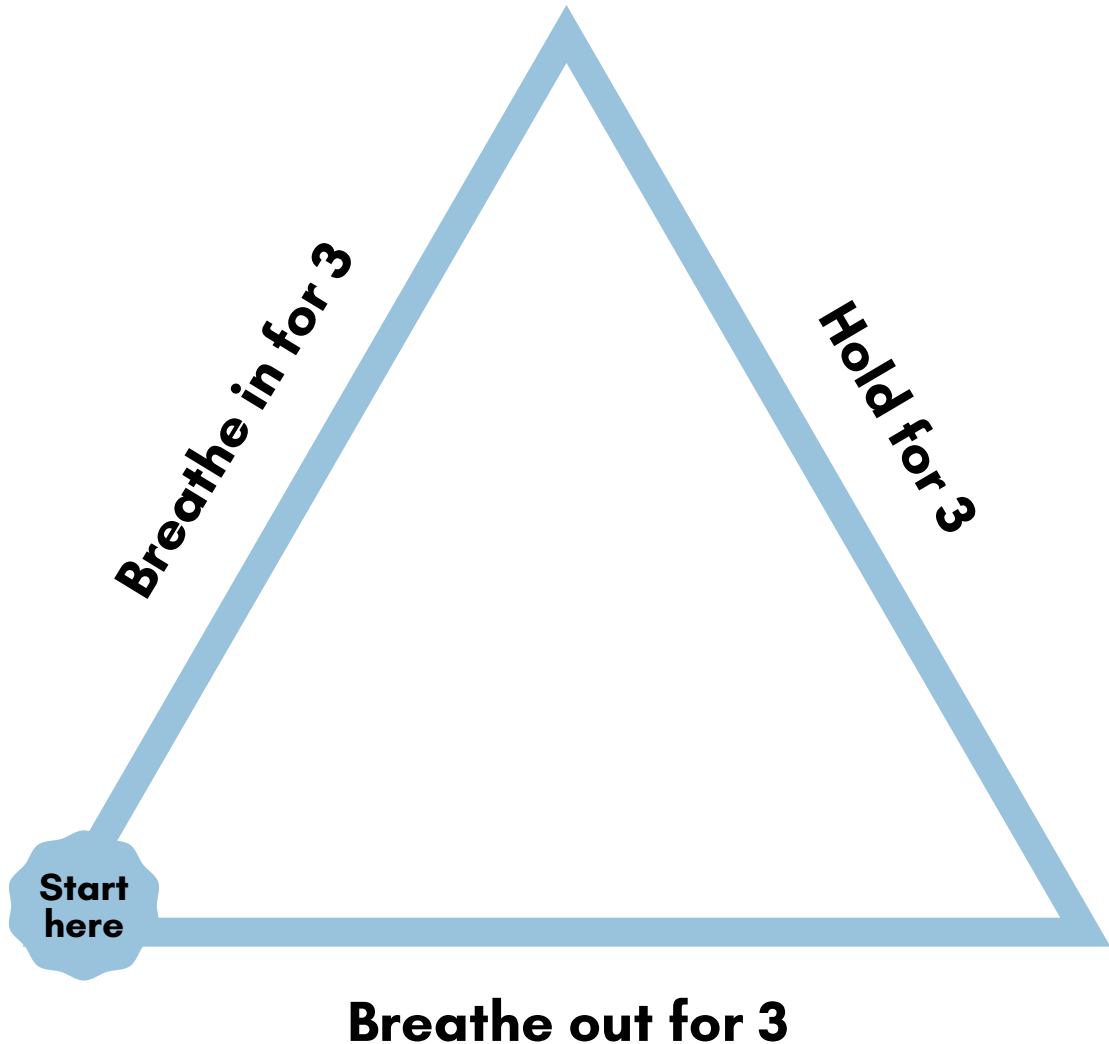


10. $x - y =$

- a) 45
- b) 14
- c) 8
- d) 0

TRIANGLE BREATHING

BRAIN BREAK

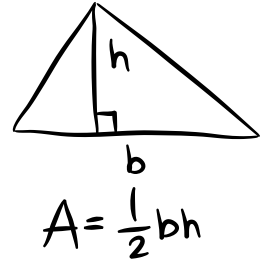
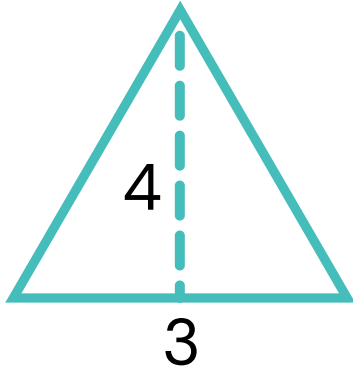


Starting at the left bottom of the triangle. Trace your finger up the side while you take a deep breath in. Hold your breath for three seconds as you slide down the other side. Breathe out along the bottom of the triangle. Repeat it until you are calm.

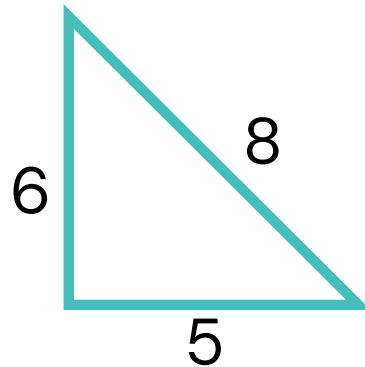
AREA OF TRIANGLES

Determine the area of the triangles below.

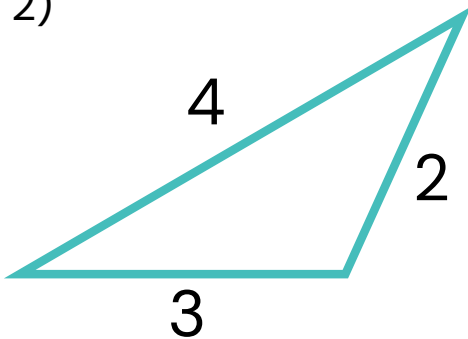
1)



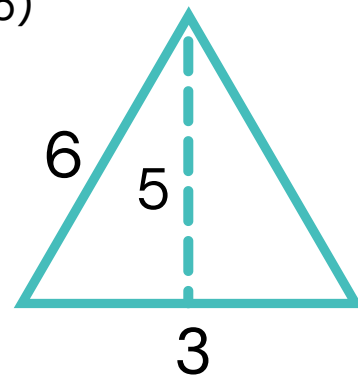
4)



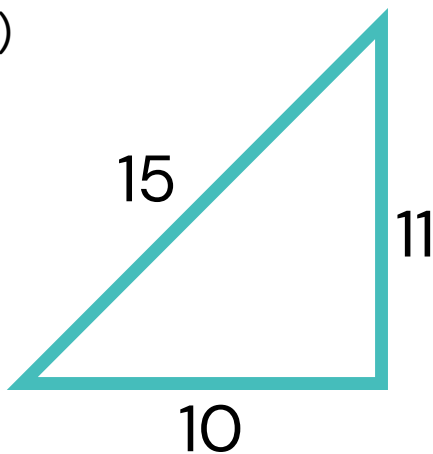
2)



5)



3)



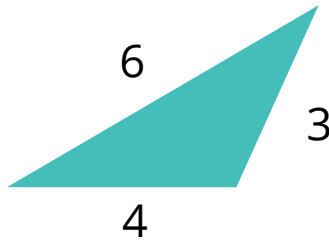
The Triangle Inequality

The sum of any two sides of a triangle must be greater than the third side of a triangle. Determine whether each set of three lengths could be the three sides of a triangle.

The first one has been done for you.

For example:

A figure with the lengths 3, 4, and 6 forms a triangle.



$$3 + 4 > 6$$

$$3 + 6 > 4$$

$$4 + 6 > 3$$

Lengths	Does it form a triangle?
3, 4, 5	$3 + 4 > 5$, yes it forms a triangle
1, 2, 5	
4, 6, 9	
7, 7, 7	
2, 5, 10	
4, 4, 4	