**What is the difference between clientHeight, offsetHeight and scrollHeight in Javascript?**

To know the difference you have to understand the [box model](https://developer.mozilla.org/en-US/docs/Web/CSS/box_model), but basically:

[clientHeight](https://developer.mozilla.org/en-US/docs/Web/API/Element/clientHeight):

returns the inner height of an element in pixels, including padding but **not** the horizontal **scrollbar height**, **border**, or **margin**

[offsetHeight](https://developer.mozilla.org/en-US/docs/Web/API/HTMLElement.offsetHeight):

is a measurement which **includes** the element **borders**, the element vertical padding, the element horizontal **scrollbar** (if present, if rendered) and the element CSS height.

[scrollHeight](https://developer.mozilla.org/en-US/docs/Web/API/Element/scrollHeight):

is a measurement of the height of an element's content **including** content **not visible** on the screen **due to overflow**

I will make it easier:

Consider:

<element>

<!-- \*content\*: child nodes: --> | content

A child node as text node | of

<div id="another\_child\_node"></div> | the

... and I am the 4th child node | element

</element>

**scrollHeight**: ENTIRE content & padding (visible or not)  
Height of all content + paddings, despite of height of the element.

**clientHeight**: VISIBLE content & padding  
Only visible height: content portion limited by explicitly defined height of the element.

**offsetHeight**: VISIBLE content & padding + border + scrollbar  
Height occupied by the element on document.

 