

Measuring Type

Point Size, X-Height, Caps Height

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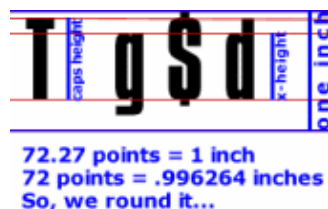
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Effective use of type means knowing how to measure type. Traditionally, type size is designated in points and is set to specific pica widths and depth (column width and height -- 1 point = .013837 in. & 12 points = 1 pica). Two common misconceptions are:

1. 72 points (6 picas) = 1 inch (**72 points = .996264 inches**)
2. A letter at 72 points is 1 inch tall (**possible but not usually true**)



Caps height and X-height are two measures specific to a particular font.

However, for all practical type measurement purposes we round 72 points to 1 inch. When we take spacing above and below a line of type into consideration, when set at 72 points the line of type will take up approximately an inch of vertical space.

X-Height is not the average height of all the X-Men

There are several different size aspects of a standard typeface that affects its appearance, readability, and suitability to different tasks. The point size of a font is a measure of the overall space that the characters occupy not the actual size of any individual character.

In addition to point size, caps height and x-height are two other measures of importance. All three are moving targets. That is, two fonts at 72 points can have vastly different visual size due to caps height, x-height, and other factors specific to that font.

The sidebar image shows one font and some of its size factors. The font size is 72 points. The distance between the two blue lines is 1

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inch. As you can probably tell, none of these characters are 1 inch (or even .996264 in.) tall.

- The red line that the type sits on is the **baseline**. The tail (descender) of the lower case g extends below the baseline. The baseline is the starting point for several type-related measurements including x-height, caps height, and leading (space between lines of type).
- The red line above the baseline sits on top of the g and the bowl of the d. The space between those two lines represent the **x-height** of that font. The x-height relative to the caps height affects font readability and is one factor to consider when specifying leading for a passage of text.
- The next red line in this image runs along the top of the T. The space between the baseline and that line is the **caps height**. It represents the size of most uppercase characters in that font.
- Not all characters fit neatly within the x-height and caps height measurements. The tallest character in this specific typeface is the \$ (dollar sign) which extends both above and below those measurements.

What's the Point?

Points are used not only to measure the type itself, but the space around it. Setting leading (line spacing) requires a basic understanding of points and type measurements. Points and picas may also be used to set margins, specify column widths, and spaces between columns.

The purpose of this article is simply to acquaint you with some of the terminology associated with measuring type. Other tutorials will address more detailed use of this information.

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