Drafting Triangle Tip

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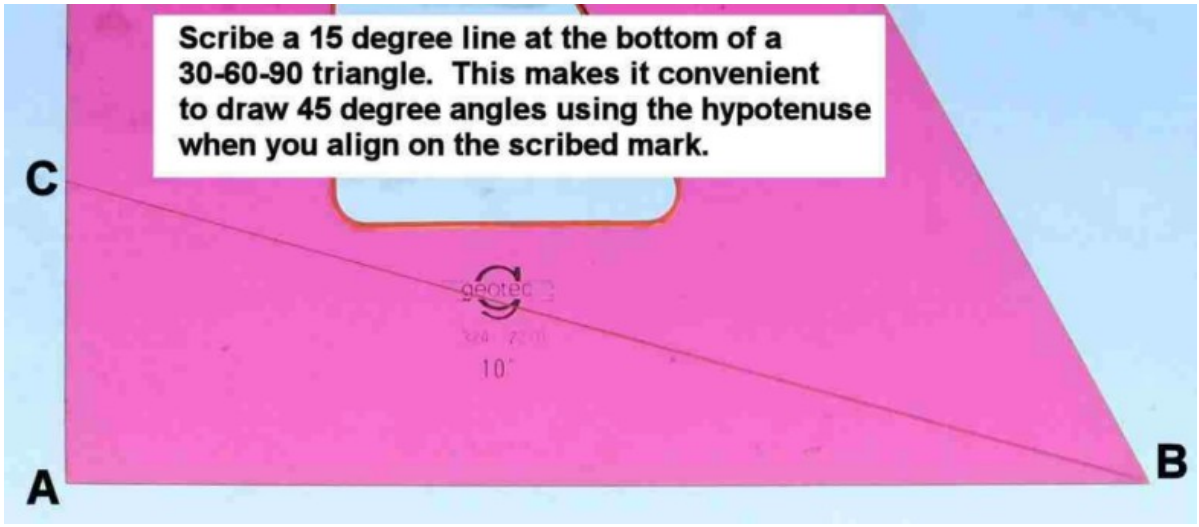
A few decades ago it occurred to me to scribe a line on my 30-60-90 drafting triangles:



I prefer using two of these types of triangles when drafting with a tee-square, but often we want to draw a 45° line with the horizontal. This scribed line makes it easy to do: just line up the scribed line with a horizontal line and the triangle's hypotenuse is at a 45° angle to the horizontal line.

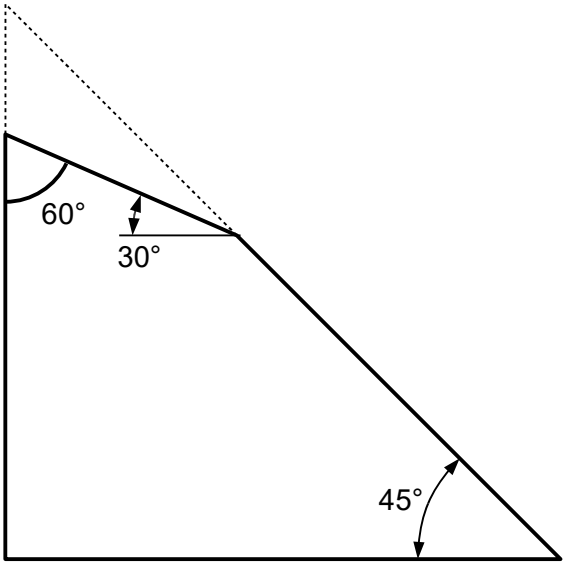
Make sure you scribe the line carefully, as there's no easy way to erase a mistake. Make angle ABC a 15° angle: then 60° - 15° is the required 45°.

By the way, if you're going to buy yourself a triangle, there are a couple of things to think about. Some triangles put small rabbets under each outside edge. This is done so that ink doesn't wick under the triangle when inking or using e.g. a felt pen. But this style with the rabbet will annoy you if you do your drafting with pencil, especially a 2 mm lead or wooden pencil, because the lead can go under the edge. The plain edge triangles were much more common.

A second important thing to note is the small angled bevel on the inside hole of the triangle. If that isn't there, you'll have a much harder time getting your fingernail under the triangle to lift it up off a table. Fortunately, a few minutes with a file can put this bevel there if the manufacturer was too cheap to do so.

You'll also probably find that drafting triangles are (or should be) made to high standards. Those angles should be correct to as carefully as you can draw -- check your triangles by drawing an angle against a straightedge and then carefully measuring the tangent with a drafting rule. Use a very sharp lead, preferably an 8H or 9H.

Update: here's another idea for a drafting triangle from a Popular Mechanics in 1921. Cut off a 45° triangle to add 30° and 60° angles:


60°
30°
45°