

## Bevel Cut 2019-11 Number Theory

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Numbers Numbers Numbers. Woodworkers have a special skill with numbers, and it's not always the skills you learn in high school (except maybe metric to English conversions). So, to get the readers started on this month's numerology: What's the next number in this sequence? (answer below). 90-9-20-290-117-x

I few years ago I bought a #4 smoothing plane at a trade show, having looked at two larger planes, a #5 and #7. A few days later I read a review of a number 60 ½ block plane and thought to myself, "this thing must be huge!" Who could even lift it, never mind shave wood with it?

I've often wondered where woodworking-plane numbers came from for. I'm sure there are some EMGW members who could explain it all. Nevertheless, I started looking online to explain the mystery for this column.

Short answer: The numbers you see today correspond to the Stanley numbering system. In theory, the number system classifies hand planes based on their size, not the number of paychecks it takes to buy one. At least that was the case for numbers 1-8 (bench planes). Beyond that, I can't say much.

In the Stanley world (not all vendors follow the Stanley rules), Smoothers are generally considered to be ##2, 3, 4 and 4 1/2, and are used for final surface smoothing because the lengths can follow the board. The #5 is a jack planes, i.e., "jack of all trades" and while they can be used to smooth, they are not designed for that because they are too long for smoothing and too short for jointing which is the purpose of #7 and #8. To add insult to injury, or perhaps just more confusion, a #5½ jack plane is a slightly wider, heavier version of the #5, while the #5¼ is a narrower, lighter version of the #5. You can't make this up. A C at the end of the number indicates a corrugated sole, while an A before the number indicates aluminum.

If you want infinite details, search for "Patrick Leach Blood and Gore" with its wealth of information on Stanley planes. It was written in numerical sequence following Stanley's bizarre numbering system which dates back to Civil War times.

One of the interesting and related web sites I stumbled across is <http://www.supertool.com/StanleyBG/stan0a.html> which has numerous links to VERY detailed and somewhat humorous descriptions alongside some rich images. The web site also included the guide below on Stanley planes and numbers. Apparently, the numbers don't relate to sizes after you get past #8. I believe the web site author is Patrick Leach himself, mister blood and gore.

Planes #1 - #8C (Bailey bench planes)

Planes #9 - #11 1/2 (mostly block planes)

Planes #12 - #20 1/2 (scrapers, more block planes, and circular planes)

Planes #21 - #37 (wood planes)

Planes #39 - #44 (dados, scrub planes)

Planes #45 - #A45 (the combination plane)

Planes #46 - #54 (combination planes, match planes, and the heavy-metal shooting board)

Planes #55 - #57 (combination plane of all and the geometric marvels of plane-dom)

Planes #60 - #70 (more block planes and more)

Planes #71 - #87 (routers, chamfer plane, rabbet planes, and scrapers)

Planes #90 - #100 (rabbet planes, side rabbets, special purpose planes)

Planes #100 1/2 - #140 (more block planes, transitionals, and a #112 scraper)

Planes #141 - #196 (match planes, rabbet planes, special purpose planes, and fiberboards)

Planes #201 - #444 (more block planes, weather-stripping planes, special dados, scrapers, and dovetail planes)

Planes #602 - #608C (Bed Rock series)

Another interesting story is the history of hand plane companies – Bailey, Stanley, Lee-Nielson and others. But we will leave that for another time; this month we're sticking to the numbers!

Answer:  $x = 2$ . These are the route numbers at interchanges as you drive north on route 495.