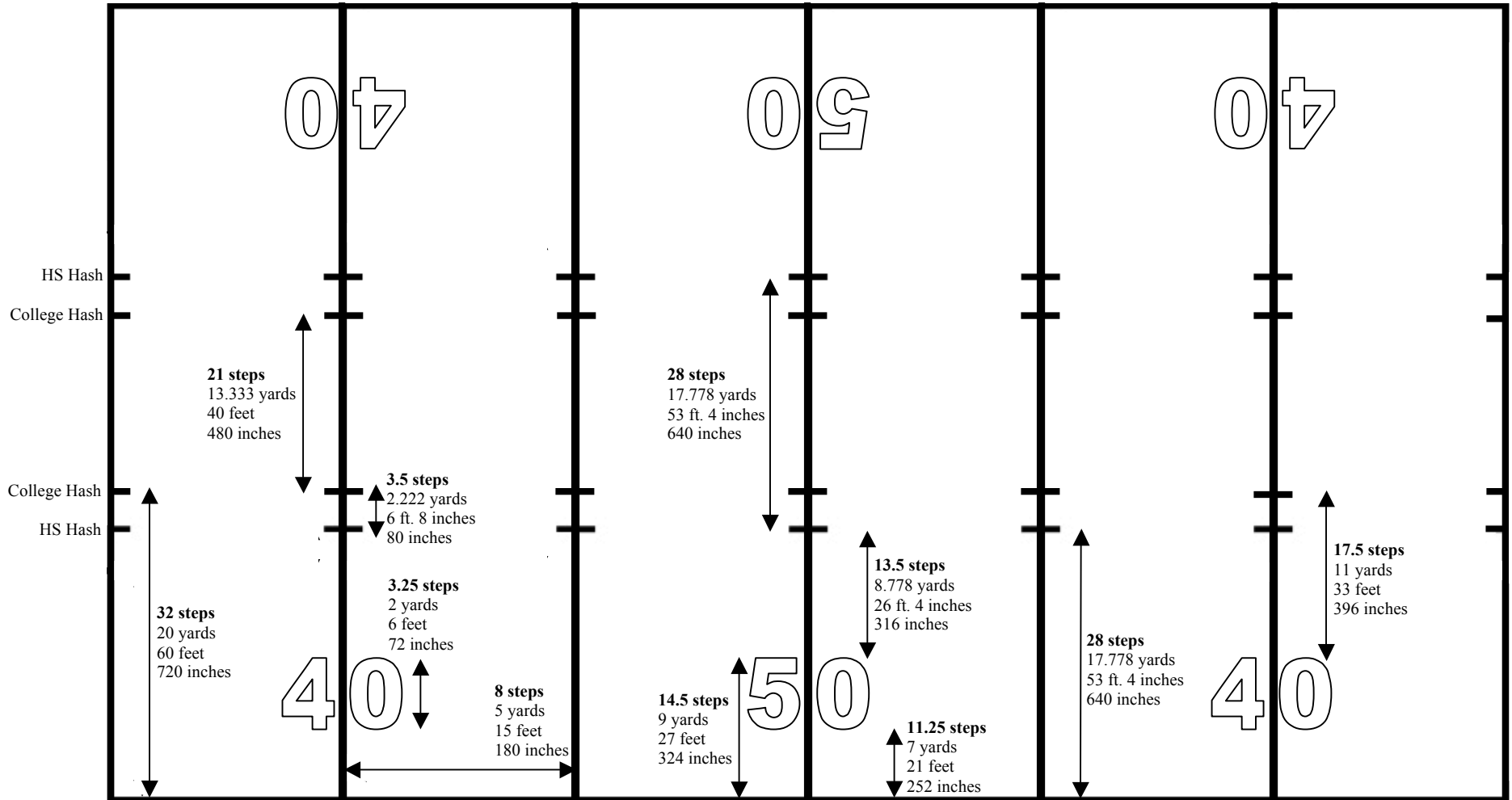


Measurements for College / High School Football Fields

Note that some organizations, drum corps, etc. choose to use a 24" step between the two college hashes. This avoids the decimal of 21.333 steps and makes it an even 20 steps at a 24" step size.



Explanation of Mathematical Inconsistencies:

Because the “most used” guides on the field are the yard lines, the common step size for marching band, $22\frac{1}{2}$ inches, was created from the measurements of the yard lines. 8 steps in every yard line is quite even and easy, thus the $22\frac{1}{2}$ inch step size creation.

Unfortunately, the measurements of the entire field do not work out to be this even. Because the IUP marching band performs mainly at high school venues, thus using the high school hashes, I have rounded our steps to work best with the high school hash.

The most important measurements we must all be familiar with are:

- ✓ 8 steps between yard lines
- ✓ 28 steps from sideline to HS hash (rounded)
- ✓ 28 steps from HS hash to back HS hash (rounded)
- ✓ 11.25 steps from sideline to bottom of numbers (rounded)
- ✓ 14.5 steps from sideline to top of numbers (rounded)
- ✓ 13.5 steps from HS hash to top of numbers (severely rounded)
- ✓ 32 steps from sideline to college hash
- ✓ 3.5 steps between college and high school hash (rounded)

The college football field (the only difference between the HS and College field is the hash location) actually works out better for marching band. There are exactly 32 steps between the sideline and college hash and 28.444 steps between the sideline and HS hash. You’ll notice that we’re using 32 steps and 28 steps, but the chart above says there are only 3.5 steps (slightly rounded) between the two hashes. This is correct! The high school hash is approximately 3.5 steps in front of the college hash and this measurement should be used when marking things off. However, because we have rounded the official 28.444 steps from sideline to HS hash to 28 steps even, it appears as though there should be 4 steps in between the HS and college hashes, though this is inaccurate.

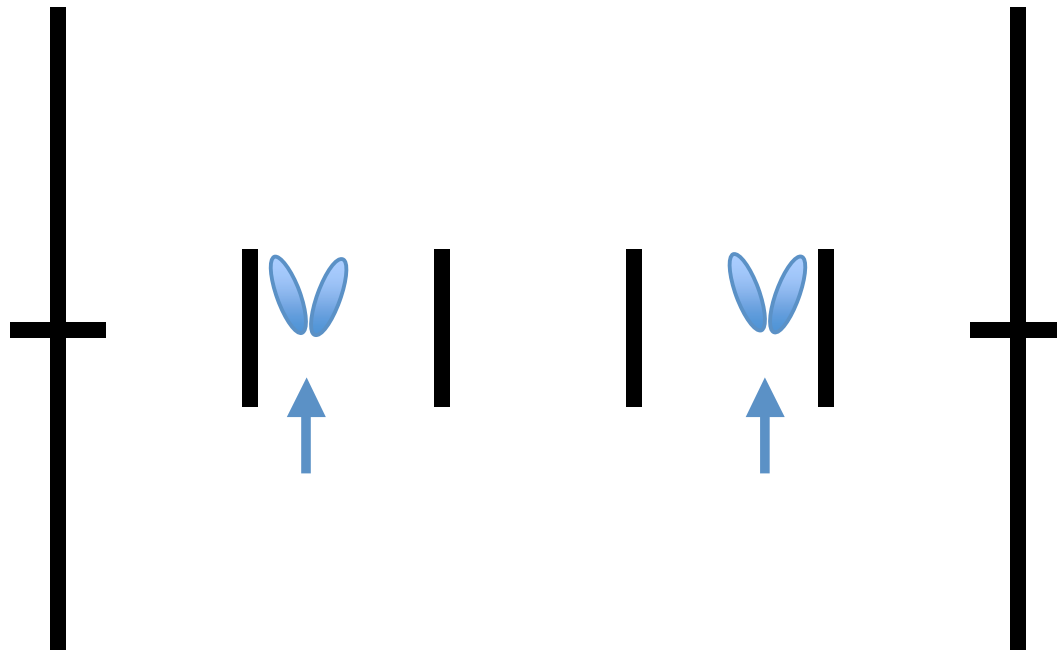
If you analyze this chart a little bit and read over what I have written a few times, hopefully it will make sense to you. It is slightly complicated, and because we’re imperfect humans, the rounding works out. Please be very familiar with the 8 measurements I have listed above as they will come in most useful throughout the season.

Examination of “2 off” and “3 off”

Another very important piece of information that we all **MUST** know is the definition of 2 off (meaning 2 steps inside or outside a yard line).

Each yard line is divided by 4 tick marks (for a total of 5 yards), and each tick mark is 1 yard (36 inches). Two 22½ inch steps, which is 45 inches, is centered at **9 inches** inside or outside the **CENTER** of the first tick mark, as shown below.

One easy way to judge whether or not you’re 2 off is to make sure, given your feet are at a good 45 degree angle and depending on the size of your feet, that there is approximately **one inch of space** between the top left (or right, depending on whether you’re inside or outside the yard line) between your foot and the tick mark. I attempted to depict this below with my awesome blue feet.



“3 off” is $67\frac{1}{2}$ inches, which is almost to the second tick mark (which is centered at 72 inches). In this case, your foot should be almost completely covering the tick mark. This is depicted below as best as I could. You should be able to, with this information, go back to IUP next semester and better visualize the exact locations of 2 and 3 off, then pass that information onto your sections.

You should all be able to do the math and find out exactly where “1 off” is... 36 inches divided by two is 18 inches. If one step size is $22\frac{1}{2}$ inches, and half way between the yard line and the first tick mark is 18 inches, then you know you need to be $4\frac{1}{2}$ inches closer to the tick mark than half way.

In general, you can remember that these coordinates, 1, 2, and 3 off, are usually bigger than you think. In most cases you’ll find yourself telling people that their 1, 2, and 3 off’s are too small, not too large.

