

1. The longest line in the inch is in the middle. This is the half-inch mark and there is only one.
2. The next shortest line is the $1 / 4^{\prime \prime}$ (one quarter of an inch) inch mark and there are only two of these.
3. The third shortest line is the $1 / 8^{\prime \prime}$ (one eighth of an inch) mark and there are four of these.
4. The fourth shortest is the $1 / 16^{\prime \prime}$ (one sixteenth of an inch) mark and there are eight of these.

5 . Some rulers will go a step further, down to $1 / 32^{\prime \prime}$ but this is often more precise that most woodworking cuts need to be.

On the typical ruler the basic (smallest) unit of measurement is $1 / 16^{\prime \prime}$. If you count the distance between two inch marks (one inch) you will find sixteen lines. This is because an inch is $16 / 16$ th of an inch long. Because we like to express fractional numbers in the largest unit possible we call it one inch. So it follows that if you have 8 lines, or $8 / 16^{\prime \prime}$ you have a half-inch or $1 / 2^{\prime \prime}$. And likewise, if you have 4 little lines, or $4 / 16^{\prime \prime}$ you have a quarter inch and so on.


At first it can be a little cumbersome to count these lines but over time you will learn to recognize the lengths and the different units of measurements they represent. This often starts with the $1 / 2^{\prime \prime}$ mark and progresses down the line. Over time a measurements like $3 / 8^{\prime \prime}$ or $5 / 16^{\prime \prime}$ can be located quickly.

