

Title:

How to Convert Millimeters (mm) to Inches (in)

Word Count:

223

Summary:

To convert a unit from millimeters to inches, multiple steps are necessary as the two units are in a different system of units. Millimeters is in a number form, 1×10^{-3} meters (the standard unit of length), and is one of the metric unit systems and a part of the International System of Units (SI). On the other hand, an inch is a unit of length in a few systems such as in the English units, Imperial units, and the United States customary units. It is basically $1/36$ th of a yard or $1/12$ th of a foot.

Keywords:

Millimeters, Inches, Convert

Article Body:

To convert a unit from millimeters to inches, multiple steps are necessary as the two units are in a different system of units. Millimeters is in a number form, 1×10^{-3} meters (the standard unit of length), and is one of the metric unit systems and a part of the International System of Units (SI). On the other hand, an inch is a unit of length in a few systems such as in the English units, Imperial units, and the United States customary units. It is basically $1/36$ th of a yard or $1/12$ th of a foot.

Direct Rates

1 millimeters = 0.0393700787 inch

1 inch = 25.4 millimeters

Using the Factor-Label Method of Conversion

So, to convert millimeters to inches, method known as the factor-label method of conversion must be done.

1. Firstly, we know that 25.4×10^{-3} meters equals 1 inch. But before that, meters must be converted to millimeters. 1 meter = 1,000 millimeters
2. Considering how 25.4×10^{-3} meters equals an inch, and 1,000 millimeters equals a meter, we can find the relationship between an inch and a millimeter by finding the product of: $25.4 \times 10^{-3} \times 1,000$

3. This equals to 25.4 millimeters equaling an inch. This basically means that 1 millimeter equals 1/25.4 of an inch.

Work Shown

$1 \text{ mm} / 1 \times 10^{-3} \text{ m} = 1 \text{ m} / 100 \text{ cm} = 1 \text{ cm} / (1/2.54) \text{ in.}$

Crossing out the meters (m) and centimeters (cm) gives us a relationship between the millimeter (mm) and the inch (in.).