



Fraction, Decimal and Metric Equivalent Conversions

| <u>Fractional</u> <u>Inch</u> | <u>Decimal</u> <u>Equivalent</u> | <u>Millimeters</u> | <u>Fractional</u> <u>Inch</u> | <u>Decimal</u> <u>Equivalent</u> | <u>Millimeters</u> |
|----------------------------------|-------------------------------------|--------------------|----------------------------------|-------------------------------------|--------------------|
| 1/64 | 0.0156 | 0.397 | 33/64 | 0.5156 | 13.097 |
| 1/32 | 0.0313 | 0.794 | 17/32 | 0.5313 | 13.494 |
| 3/64 | 0.0469 | 1.191 | 35/64 | 0.5469 | 13.891 |
| 1/16 | 0.0625 | 1.588 | 9/16 | 0.5625 | 14.288 |
| 5/64 | 0.0781 | 1.984 | 37/64 | 0.5781 | 14.684 |
| 3/32 | 0.0938 | 2.381 | 19/32 | 0.5938 | 15.081 |
| 7/64 | 0.1094 | 2.778 | 39/64 | 0.6094 | 15.478 |
| 1/8 | 0.1250 | 3.175 | 5/8 | 0.6250 | 15.875 |
| 9/64 | 0.1406 | 3.572 | 41/64 | 0.6406 | 16.272 |
| 5/32 | 0.1563 | 3.969 | 21/32 | 0.6563 | 16.669 |
| 11/64 | 0.1719 | 4.366 | 43/64 | 0.6719 | 17.066 |
| 3/16 | 0.1875 | 4.763 | 11/16 | 0.6875 | 17.463 |
| 13/64 | 0.2031 | 5.159 | 45/64 | 0.7031 | 17.859 |
| 7/32 | 0.2188 | 5.556 | 23/32 | 0.7188 | 18.256 |
| 15/64 | 0.2344 | 5.953 | 47/64 | 0.7344 | 18.653 |
| 1/4 | 0.2500 | 6.350 | 3/4 | 0.7500 | 19.050 |
| 17/64 | 0.2656 | 6.747 | 49/64 | 0.7656 | 19.447 |
| 9/32 | 0.2813 | 7.144 | 25/32 | 0.7813 | 19.844 |
| 19/64 | 0.2969 | 7.541 | 51/64 | 0.7969 | 20.241 |
| 5/16 | 0.3125 | 7.938 | 13/16 | 0.8125 | 20.638 |
| 21/64 | 0.3281 | 8.334 | 53/64 | 0.8281 | 21.034 |
| 11/32 | 0.3438 | 8.731 | 27/32 | 0.8438 | 21.431 |
| 23/64 | 0.3594 | 9.128 | 55/64 | 0.8594 | 21.828 |
| 3/8 | 0.3750 | 9.525 | 7/8 | 0.8750 | 22.225 |
| 25/64 | 0.3906 | 9.922 | 57/64 | 0.8906 | 22.622 |
| 13/32 | 0.4063 | 10.319 | 29/32 | 0.9063 | 23.019 |
| 27/64 | 0.4219 | 10.716 | 59/64 | 0.9219 | 23.416 |
| 7/16 | 0.4375 | 11.112 | 15/16 | 0.9375 | 23.813 |
| 29/64 | 0.4531 | 11.509 | 61/64 | 0.9531 | 24.209 |
| 15/32 | 0.4688 | 11.906 | 31/32 | 0.9688 | 24.606 |
| 31/64 | 0.4844 | 12.303 | 63/64 | 0.9844 | 25.003 |
| 1/2 | 0.5000 | 12.700 | 1 | 1.0000 | 25.400 |



Mathematical Formulas

To find the radius of a circle:

- Multiply circumference by 0.15915 | Or divide circumference by 6.28318

To find the circumference of a circle:

- Multiply diameter by 3.1416
- Or divide diameter by 0.3183

Square:

- A side multiplied by 1.4142 equals diameter of its circumscribing circle
- A side multiplied by 3.547 equals circumference of an equal circle
- A side multiplied by 4.443 equals circumference of its circumscribing circles
- Square inches multiplied by 1.273 equals circle inches of an equal circle

To find side of an equal square:

- Multiply diameter by 0.8861
- Or divide diameter by 1.1284
- Or multiply circumference by 0.2821
- Or divide circumference by 3.545

To find the surface of a sphere or globe:

- Multiply the diameter by the circumference
- Or multiply the square of diameter by 3.1416
- Or multiply four times the square of radius by 3.1416
- Ascertain the number of cubic inches in a piece and multiply same by weight per cubic inch

To find diameter:

- Multiply circumference by 0.3183
- Or divide circumference by 3.1416

To find side of an inscribed square:

- Multiply diameter by 0.7071
- Or multiply circumference by 0.2251
- Or divide circumference by 4.4428

To find the area of a circle:

- Multiply circumference by one quarter of the diameter
- Or multiply the square of diameter by 0.7854
- Or multiply the circumference by 0.07958
- Or multiply the square of 1/2 diameter by 3.1416