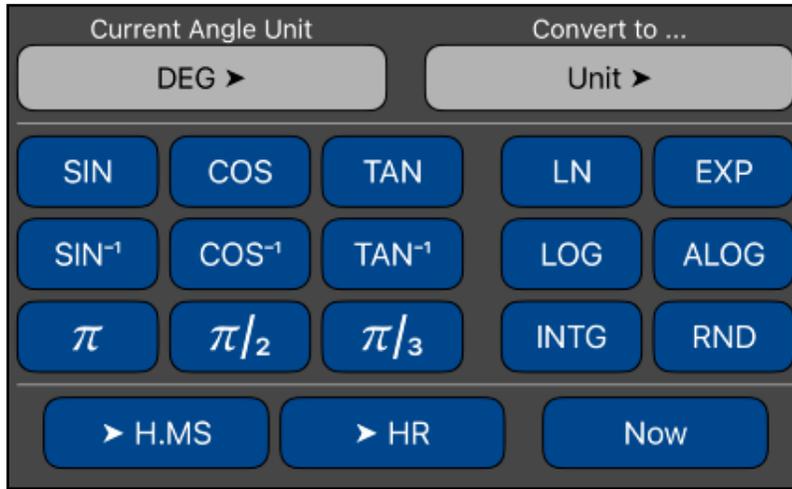


# Math Functions Worksheet

This worksheet provides a direct way to apply math functions, angle conversion or time conversions to the displayed number.



Current Angle Unit [ <b>DEG &gt;</b> ]	Menu to select the actual angle unit of the displayed number. IT is used to convert to another unit or to apply a trigonometric function.
Convert To... [ <b>Unit &gt;</b> ]	Menu to select the unit to convert the displayed number in the current unit to the selected unit.
[ <b>SIN</b> ]	Calculates the sine of the displayed number angle.
[ <b>COS</b> ]	Calculates the cosine of the displayed number angle.
[ <b>TAN</b> ]	Calculates the tangent of the displayed number angle.
[ <b>SIN<sup>-1</sup></b> ]	Calculates the arc-sine of the displayed number angle.
[ <b>COS<sup>-1</sup></b> ]	Calculates the arc-cosine of the displayed number angle.
[ <b>TAN<sup>-1</sup></b> ]	Calculates the arc-tangent of the displayed number angle.
[ <b>LN</b> ]	Calculates the natural logarithm of the displayed number.
[ <b>EXP</b> ]	Calculates the exponential of the displayed number.
[ <b>LOG</b> ]	Calculates the common logarithm (base 10) of the displayed number.
[ <b>ALOG</b> ]	Calculates the anti logarithm of the displayed number angle.
[ <b>INTG</b> ]	Calculates the integer part of the displayed number angle.
[ <b>RND</b> ]	Rounds the displayed number angle to the N° of decimals setting.
[ <b>&gt;HMS</b> ]	Convert the displayed number to Hour-Minute-Second (H.MMSS).
[ <b>&gt; HR</b> ]	Converts the displayed number to decimal hours.
[ <b>NOW</b> ]	Enter the current time in the Display in HMS format.

**Example 1:** Convert 88° 57' 23.45" to decimal degrees.

Keystrokes	Description
type 88.572345	Type the angle value
Select [ <b>DMS</b> ] in the Current Angle Unit	Set the current angle unit to Degree-Minute-Seconds.
Convert To [ <b>DEG</b> ]	Convert to decimal Degrees. <b>Result = 88.96</b>

**Example 2:** Convert " $\pi / 3$ " Radians to Degree-Minute-Second Format.

Keystrokes	Description
[ $\pi / 3$ ]	Input initial value. <b>Result = 1.0472</b> ( $\pi / 3$ radians).
Select [ <b>RAD</b> ] in the Current Angle Unit	Set the current angle unit to Radians.
Convert To [ <b>DMS</b> ]	Convert to D.MMSS format. <b>Result = 60.00</b> (60° 0' 0").

**Example 3: (Trigonometric Functions)**

Calculation	Keystrokes	Result
Sine of 33.5 degrees	33.5 [ <b>DEG</b> ► ] [ <b>SIN</b> ]	<b>0.55</b>
Cosine of 0.25 radians	0.25 [ <b>RAD</b> ► ] [ <b>COS</b> ]	<b>0.97</b>
Tangent of 78 gradians	78 [ <b>GRD</b> ► ] [ <b>TAN</b> ]	<b>2.78</b>
Arc-Sine of 0.7982 in radians	0.7982 [ <b>RAD</b> ► ] [ <b>SIN<sup>-1</sup></b> ]	<b>0.92</b>
Arc-Cos. of 0.2437 in gradians	0.2437 [ <b>GRD</b> ► ] [ <b>COS<sup>-1</sup></b> ]	<b>84.33</b>
Arc-Tangent of 0.4567 in degrees	0.4567 [ <b>DEG</b> ► ] [ <b>TAN<sup>-1</sup></b> ]	<b>24.55</b>

**Example 4: (Logarithms)**

Calculation	Keystrokes	Result
Common logarithm of 2.5	2.5 [ <b>LOG</b> ]	<b>0.40</b>
Natural logarithm of 68	68 [ <b>LN</b> ]	<b>4.22</b>
Exponential of 4.6	4.6 [ <b>EXP</b> ]	<b>99.48</b>
Anti logarithm of 3.56	3.56 [ <b>ALOG</b> ]	<b>3,630.78</b>

## Example 5: Decimal Hour and H:MM:SS

How can you read 13.2756 decimal number as a time? and the time in 1 hour and 20 minutes more ?

### Solution:

Keystrokes	Description
13.2756 [ <b>→H.MS</b> ]	Result -> <b>13.1632</b> (13 hours, 16 minutes and 32 seconds)
<b>[→HR]</b>  [ + ] 1.20 [ <b>→HR</b> ] [ = ]	Convert to decimal hours. Result -> <b>13.2756</b>  Decimal hours result -> <b>14.6089</b>
<b>[→H.MS]</b>	Result -> <b>14.3632</b> (14 hours, 36 minutes and 32 seconds).