

Example: convert 41.72074° to degrees, minutes, seconds

There are 41° so save that and subtract it to get the fractional part 0.72074 .

41°

There are $60'$ in one degree, so multiply 60 by the fractional part of the degree $0.72074 \times 60 = 43.2444'$

Save the full minutes $43'$ and subtract it to get the fractional part of the minutes, 0.2444 .

$43'$

There are $60''$ in a full minute of arc, so multiply 60 by the fractional part

$0.2444 \times 60 = 14.664''$. We can either keep the full decimal seconds of arc or round to the nearest second. Rounding gives $15''$

All together this gives

$15''$

$41^\circ 43' 15''$