Local Apparent Noon using GHA
Western Longitudes

Date- _____

1- Your longitude	° '	
2- Get GHA < your longitude for the date*	° '	*GHA integral hour*=
3- Subtract GHA from your longitude	° '	
4- Convert answer from step 3 to time using *Table 3- Conversion of Arc to Time* Get Table 3 here- https://thenauticalalmanac.com/TABLE 3- Conversion of Arc to Time.pdf *You can also convert arc to time using steps 6 through 9 below.*	00 : :	
5- Answer from step 4 converted to time. Put *GHA integral hour* in hour place	: :	**Local Apparent Noon**

...or... convert degrees in step 3 to time as follows;

6- Step 3 GHA integral degrees	° X 4 =	**minutes of time**
7- Step 3 GHA minutes of arc < 15'	' X 4 =	**minutes of time**
8- Step 3 GHA minutes of arc > 15'	' / 15 =	**minutes of time**
9- Remainder minutes of arc from step 8	' X 4 =	**seconds of time**
10- Add steps 6 through 9 **minutes of time** and **seconds of time**	: :	**Local Apparent Noon**

Convert Arc to Time

Degrees to time if degrees < 15°
     Example- 14° x 4 = 56 minutes of time

Minutes of arc < 15' then *multiply* minutes of arc by 4
     Example- 0° 09' = 4 x 09' = 36 minutes of time

Minutes of arc > 15' then *divide* minutes of arc by 15
     Example- 0° 27' = 27' / 15 = 1 minute of time
       Remainder= 12' minutes of arc
         Multiply remainder minutes of arc by 4 (as above)

* The GHA < your longitude for the specific date must be used and can be found in The Nautical Almanac. Get The Nautical Almanac at TheNauticalAlmanac.com

Local Apparent Noon using GHA
Eastern Longitudes

Date- _____

1- Your longitude	° '	
2- 360° – Your Longitude		
3- Get GHA < your longitude for the date*	° '	*GHA integral hour*=
4- Subtract GHA from your longitude	° '	
5- Convert answer from step 4 to time using *Table 3- Conversion of Arc to Time* Get Table 3 here- https://thenauticalalmanac.com/TABLE 3- Conversion of Arc to Time.pdf *You can also convert arc to time using steps 7 through 10 below.*	00 : :	
6- Answer from step 5 converted to time. Put *GHA integral hour* in hour place	: :	**Local Apparent Noon**

...or... convert degrees in step 3 to time as follows;

7- Step 5 GHA integral degrees	° X 4 =	**minutes of time**
8- Step 5 GHA minutes of arc < 15'	' X 4 =	**minutes of time**
9- Step 5 GHA minutes of arc > 15'	' / 15 =	**minutes of time**
10- Remainder minutes of arc from step 9	' X 4 =	**seconds of time**
11- Add steps 7 through 10 **minutes of time** and **seconds of time**	: :	**Local Apparent Noon**

Convert Arc to Time

Degrees to time if degrees < 15°
        Example- 14° x 4 = 56 minutes of time

Minutes of arc < 15' then *multiply* minutes of arc by 4
        Example- 0° 09' = 4 x 09' = 36 minutes of time

Minutes of arc > 15' then *divide* minutes of arc by 15
        Example- 0° 27' = 27' / 15 = 1 minute of time
                Remainder= 12' minutes of arc
                    Multiply remainder minutes of arc by 4 (as above)

* The GHA < your longitude for the specific date must be used and can be found in The Nautical Almanac. Get The Nautical Almanac at TheNauticalAlmanac.com