Video 3: Application with Complex Formulas

If Statements

DATA CLEANING WITH IF STATEMENTS
If Statements

RESIDENT VS NON-RESIDENT

=IF(A2="Nashua","Resident", "Non-Resident")

SHIFT

=IF(AND(A2>1659,A2<2400),"Night","Not Night")
**Time Formulas**

**WITH TEXT DATES (7/15/20)**

\[=DATEVALUE(A2)\]

**WITH TEXT TIMES (300PM)**

\[=TIMEVALUE(CONCATENATE(LEFT(C2,1),"\",MID(C2,2,2),"\",RIGHT(C2,2)))\]

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**Time Formulas**

**WITH NUMBER DATES (20200101)**

\[=DATE(LEFT(E2,4),MID(E2,5,2),RIGHT(E2,2))\]

**WITH NUMBER TIMES (1500)**

\[=TIME(G2/100,RIGHT(G2,2),0)\]
Time Calculations

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrived</td>
<td>Cleared</td>
<td>Elapsed</td>
<td>Notes</td>
</tr>
<tr>
<td>2/11/2020 23:52</td>
<td>2/12/2020 1:00</td>
<td>1:00:00</td>
<td>Get the elapsed time in terms of numbers, to change it,</td>
</tr>
<tr>
<td>2/12/2020 14:45</td>
<td>2/12/2020 15:20</td>
<td>0:35:00</td>
<td>Then format the cell by selecting custom and finding the format we prefer (E4 is shown in &quot;h:mm:ss&quot;)</td>
</tr>
</tbody>
</table>

HOURS BETWEEN TIMES
=TEXT(B2-A2,"h")

HOURS & MINUTES BETWEEN TIMES
=TEXT(B2-A2,"h:mm")

HOURS, MINUTES & SECONDS BETWEEN TIMES
=TEXT(B2-A2,"h:mm:ss")

NUMBER OF COMPLETE HOURS BETWEEN TIMES
=INT((B2-A2)*24)

NUMBER OF MINUTES BETWEEN TIMES
=(B2-A2)*1440
Time Calculations

TIME ELAPSE FROM NOW
=NOW()-A2

Time Calculation Tips

• Space

  NO 12:00:00PM  YES 12:00:00 PM

• Format using CUSTOM [h]:mm

• When dates/times cross over midnight, use MOD

  =MOD((B2-A2),1)

• When calculating/summing time that will exceed 24 hours

  Sum, then format, then CUSTOM [h]:mm
## Predictions

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>DOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006-1609</td>
<td>8/6/2020</td>
<td>19:30 201 WOODGLEN VICTORIA, TX</td>
<td>NA</td>
<td>WA</td>
<td>Wed</td>
<td>Tue</td>
</tr>
<tr>
<td>2006-1638</td>
<td>8/12/2020</td>
<td>10:15 3803 N JOHN Stockbauer DR VICTORIA, TX</td>
<td>11</td>
<td>Sun</td>
<td>9:15</td>
<td>Tue</td>
</tr>
<tr>
<td>2006-1802</td>
<td>8/15/2020</td>
<td>20:09 3803 N JOHN Stockbauer DR VICTORIA, TX</td>
<td>7</td>
<td>Tue</td>
<td>7:40</td>
<td>Thu</td>
</tr>
<tr>
<td>2006-1818</td>
<td>8/16/2020</td>
<td>20:50 2022 HOUSTON HIGHWAY/EN JORDAN ST VICT</td>
<td>3</td>
<td>Sat</td>
<td>8</td>
<td>Wed</td>
</tr>
<tr>
<td>2006-1838</td>
<td>8/19/2020</td>
<td>20:40 200 S MAIN ST VICTORIA, TX</td>
<td>11</td>
<td>Sun</td>
<td>3</td>
<td>Sat</td>
</tr>
<tr>
<td>2006-1844</td>
<td>8/22/2020</td>
<td>20:30 1007 RIO GRANDE ST VICTORIA, TX</td>
<td>7</td>
<td>Tue</td>
<td>7</td>
<td>Tue</td>
</tr>
<tr>
<td>2006-1850</td>
<td>8/25/2020</td>
<td>19:30 1003 FERN LN VICTORIA, TX</td>
<td>7</td>
<td>Wed</td>
<td>10</td>
<td>Wed</td>
</tr>
<tr>
<td>2006-2045</td>
<td>10/16/2020</td>
<td>17:55 2700 SALEM Rd VICTORIA, TX</td>
<td>7</td>
<td>Wed</td>
<td>7</td>
<td>Wed</td>
</tr>
<tr>
<td>2006-2054</td>
<td>10/27/2020</td>
<td>19:42 2403 BOOKER ST VICTORIA, TX</td>
<td>6</td>
<td>Tue</td>
<td>6</td>
<td>Tue</td>
</tr>
<tr>
<td>2006-2225</td>
<td>11/5/2020</td>
<td>18:35 100 TAMPELO CT VICTORIA, TX</td>
<td>13</td>
<td>Mon</td>
<td>13</td>
<td>Mon</td>
</tr>
</tbody>
</table>

**Average:** 19:00  
**St Dev:** 0:46  
**Minimum:** 17:40  
**Maximum:** 20:20  

**Predictions:**  
- **Minimum:** 11/12/2020 17:40  
- **1 St Dev:** 11/13/2020 18:13  
- **+ 1 St Dev:** 11/14/2020 18:47  
- **Minimum:** 11/23/2020 20:20  

Created by Dawn Reeby. September 2020.