

Resource – Curious Calculations

Below you will find a series of interesting and unique calculations that can be used in various areas of your REDCap projects. Alongside of the calculation itself will be a brief explanation of its use and purpose. As these are examples, the variable names used in the calculations will be placeholders with simple names like [field1] or [date2]. You will need to replace those placeholder variables with fields/variables from your actual project. All calculations will have been tested on a previous version of REDCap (12.0.19+) but may not have been tested on our current REDCap version. Always test before implementation!

Calc 1: Day of the Week

Allows the day of the week to be displayed after reading a single [date] field. Note: this is a CALCTEXT calculation so it must be added as an Action Tag to a Text Box field type. As well, be sure your [date] field is validated in the YMD format.

```
@CALCTEXT(
```

```
if(round(7*((datediff("1899-12-31", [date], 'd')/7)-rounddown((datediff("1899-12-31", [date], 'd')/7))))=0,"Sunday",
```

```
if(round(7*((datediff("1899-12-31", [date], 'd')/7)-rounddown((datediff("1899-12-31", [date], 'd')/7))))=1,"Monday",
```

```
if(round(7*((datediff("1899-12-31", [date], 'd')/7)-rounddown((datediff("1899-12-31", [date], 'd')/7))))=2,"Tuesday",
```

```
if(round(7*((datediff("1899-12-31", [date], 'd')/7)-rounddown((datediff("1899-12-31", [date], 'd')/7))))=3,"Wednesday",
```

```
if(round(7*((datediff("1899-12-31", [date], 'd')/7)-rounddown((datediff("1899-12-31", [date], 'd')/7))))=4,"Thursday",
```

```
if(round(7*((datediff("1899-12-31", [date], 'd')/7)-rounddown((datediff("1899-12-31", [date], 'd')/7))))=5,"Friday",
```

```
if(round(7*((datediff("1899-12-31", [date], 'd')/7)-rounddown((datediff("1899-12-31", [date], 'd')/7))))=6,"Saturday",
```

```
"Unknown"))))))))
```

Calc 2: Time difference in HH:MM format

Calculate the difference in time in the output format of HH:MM between two Time or Date/Time fields. Note: the second field must have a value after the first.

@CALCTEXT(concat(round(datediff([dtime1],[dtime2],"h","mdy",true),0),":"),round(((round(datediff([dtime1],[dtime2],"h","mdy",true),2)-rounddown(datediff([dtime1],[dtime2],"h",true),0))*60),0)))