

## How to Divide a Monthly Authorization into Weeks

With the release of the SOC2271 and SOC2271A forms, questions have come up over the accuracy of the calculations displayed on the forms.

- It is important to understand that calculations involving TIME are much different than traditional decimal math. One cannot confuse the colon ":" used to separate hours from minutes and treat it as a decimal point. This will often times result in an incorrect answer.
- The best way to perform math on time is to first convert the entire Hours and Minutes into minutes, perform the math, then convert the result back into hours and minutes.

### Here is how it is done:

Let's assume the recipient is authorized 99:40 (ninety-nine hours and forty minutes) per month. We want to divide that by 4 to arrive at the maximum weekly hours that would be displayed on the SOC 2271A.

Step 1: Convert entire time into minutes. There are 60 minutes in an hour, so  $99 * 60 = 5,940$  plus the remaining 40 minutes gives a total of 5,980 minutes.

Step 2: Divide the minutes by 4.  $5,980 / 4 = 1,495$

Step 3: Convert the result back into hours and minutes. To do this, we need to determine how many FULL hours are in the result, and how many remaining minutes there are. Divide the total minutes by 60;  $1,495 / 60 = 24.91667$ . We keep the whole number (24) since that is the number of FULL hours. Now to find out how many minutes remain, we subtract the number of minutes represented by our whole number of hours from the total minutes.  $24 * 60 = 1,440$ , and  $1,495 - 1,440 = 55$ . Therefore, we have 24 whole hours and 55 minutes remaining. That means that  $99:40 / 4 = 24:55$

### **Let's look at another example that involves rounding up.**

Let's assume the recipient is authorized 233:47 (two hundred thirty-three hours and forty-seven minutes) per month. We want to divide that by 4 to arrive at the maximum weekly hours that would be displayed on the SOC 2271A.

Step 1: Convert entire time into minutes. There are 60 minutes in an hour, so  $233 * 60 = 13,980$  plus the remaining 47 minutes gives a total of 14,027 minutes.

Step 2: Divide the minutes by 4.  $14,027 / 4 = 3,506.75$

Step 3: Convert the result back into hours and minutes. To do this, we need to determine how many FULL hours are in the result, and how many remaining minutes there are. Divide the total minutes by 60;  $3,506.75 / 60 = 58.44583$ . We keep the whole number (58) since that is the number of FULL hours. Now to find out how many minutes remain, we subtract the number of minutes represented by our whole number of hours from the total minutes.  $58 * 60 = 3,480$ , and  $3,506.75 - 3,480 = 26.75$ . Since the remaining minutes are not a whole number, we round UP to the next whole number, 27. Therefore, we have 58 whole hours and 27 minutes remaining. That means that  $233:47 / 4 = 58:27$ . We round the fractional minutes UP to the next whole minute to ensure that the entire monthly authorization can be served.