

# SMART DRIVE

## *how it works*

Safety Score is calculated by taking the Sum of Observation Points over a rolling 4-week period, dividing it by the Sum of Trip Duration (ignition on to ignition off time) over a rolling 4-week period, and then multiplying that number by a factor of 10.

Since the equation is a fraction (Observed Points/Trip Duration), there are two ways a score can decrease:

1. Reduce the numerator (with trip duration not reducing as well)
  - a. Less observation points
2. Increase the denominator (with observation points not increasing as well)
  - a. More drive time

Now in theory, the prior week could have had improvement in the numerator (no observation points) but the week from 4 weeks ago had a large number of hours that dropped off, resulting in an increased Safety Score since we are looking at a 4 week period. I try to illustrate this below:

For the Safety Score we are looking at a rolling 4-week period. Here is an example of how a driver could have no points in the most recent week and their Safety Score could increase. In the example below, the 4 week Observation Score reduces, but the 4 week Trip Duration also reduces. The math for the Safety Score is  $(4\text{wk OS}/4\text{wk TD}) \times 10$ . If you do the math below you can see how a Safety Score might increase.

	Trip Duration	Observation Score	4wk TD	4wk OS	Safety Score
Week 1	40	50			
Week 2	20	50			
Week 3	30	250			
Week 4	20	100	110	450	41
Week 5	20	0	90	400	44