## In a car

You are in a car on the highway. Looking at the dashboard, you note the following information:

- it is 11:04am
- the current speed is $93 \mathrm{~km} / \mathrm{h}$
- the odometer reads 14297.3 km

Can you say what the odometer will read at 11:30am?

When making such a computation, you actually are making an assumption to derive your guess, which is:

We can represent our approximation graphically. On the following set of axes, represent the following:

- the initial data known about the car,
- the assumption made about the car,
- the estimated position of the car at 11:30am.

Describe how the graphic representation above and the computation you did on the previous page relate to each other. For example, consider estimating what the odometer might read at 11:05am.

Which approximation do you have most confidence in, the one for 11:05am or 11:30am?

Let us denote by $f[t]$ the function giving the reading of the odometer at time $t$. What might the graph of this function look like?

What do we know about this function?

In which world is our estimate of the reading of the odometer at 11:30am the most accurate?

Which of the worlds is more likely to occur?

Do you have any new questions springing from today's discussion?
$\square$
Any confusion? Misunderstandings? Difficulties?

Page to doodle on.

