

## Design Recipe

*Word Problem*

A rocket is flying from Earth to Mars at 80 miles per second. Write a function that describes the distance  $D$  that the rocket has traveled, as a function of time  $t$ .

## I. Contract+Purpose Statement

Every contract has three parts:

$$f: \underset{\text{name}}{\underline{D}} \rightarrow \underline{\hspace{10em}} \quad \text{Domain} \qquad \text{Range}$$

### III. Give Examples

Write an example of your function for some sample inputs

Use the function here	What should the function produce?
$D(1)$	=

D(2)=

Use the function here                      What should the function produce?

D( )	=
Use the function here	What should the function produce?

	=
Use the function here	What should the function produce?

### III. Definition

Write the formula, giving variable names to all your input values.

$$D(\quad) =$$