

Design Recipe

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:

;	<u>D</u>	:	<u>Number</u>	->	<u>Number</u>
	name		Domain		Range
;	<u>Given the number of seconds, produce the height of the rocket if it moves at 80mi/sec</u>				
	<i>What does the function do?</i>				

II. Give Examples

Write an example of your function for some sample inputs

$$D(1) = 80 * 1$$

Use the function here

What should the function produce?

$$D(2) = 80 * 2$$

Use the function here

What should the function produce?

$$D(3) = 80 * 3$$

Use the function here

What should the function produce?

$$D(4) = 80 * 4$$

Use the function here

What should the function produce?

III. Definition

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

$$D(\text{time}) = 80 * \text{time}$$