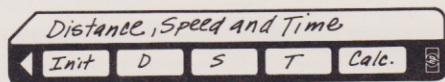


$$d = s \cdot t \quad \text{Distance} = \text{speed} \times \text{time}$$

$$s = \frac{d}{t} \quad \text{Speed} = \frac{\text{distance}}{\text{time}}$$

$$t = \frac{d}{s} \quad \text{Time} = \frac{\text{distance}}{\text{speed}}$$

We'll write a program to calculate any one of the above when the other two values are given. The key art might look like this:



Now switch to W/PRGM mode, press **f** **PRGM** and key in the following list of keys.

Keys	Comments	Keys	Comments
LBL	} Beginning of initialization routine.	RCL 2	} Otherwise calculate distance.
A		RCL 3	
f	} Set flag 1 flying.	x	
SF1		RTN	
f	} Clear the stack.	LBL	} Beginning of speed routine.
STK		C	
DSP	} Change display setting.	f	} Test flag 1.
.		TF1	
4		STO 2	} If it is, store speed and stop.
RTN	RTN		
LBL	} Beginning of distance routine.	RCL 1	} Otherwise calculate speed.
B		RCL 3	
f	} Test flag 1.	÷	
TF1		RTN	

Keys	Comments	Keys	Comments
LBL	} Beginning of time routine.	RTN	
D			
f	} Test flag 1.	LBL	} Convert input time to decimal hours.
TF1		1	
GTO	} If it is, branch to label 1.	f	
1		+D.MS	
RCL 1	} Otherwise calculate time.	STO 3	} Store in R ₃ , and stop.
RCL 2		RTN	
÷		LBL	} Beginning of calculation routine.
f	E		
+D.MS	} Then convert it to hours, minutes, seconds.	f	} Lower flag 1.
		SF1	
		RTN	

The time program is set up so that the time is input in hours, minutes, and seconds, although for calculating purposes it will be converted to decimal hours.

To calculate one of the three variables, press **A** to initialize the routines by setting flag 1. Then input a variable and press its corresponding program control key. Because the flag is set, this variable is stored away and a value is not calculated. Next, input the second variable and press its corresponding program control key. Again, the second variable is stored away and no calculation is performed. The unknown value is calculated by pressing **E** (which clears flag one) and then pressing the corresponding program control key. Because the flag is not set, the unknown value is not stored but calculated. After each calculation press **A** to initialize the routines again. Try the following examples to see how this works.