

— A FALLING BODY PROBLEM —

A heavy object is dropped from an airplane flying at a great height. Suppose the relationship between the distance fallen in feet and the time falling in seconds is given in the table below. Show how to determine a rule expressing the distance fallen as a function of the time falling.

Time Increment (sec)	Time (sec)	Distance (feet)	Distance Increment (feet)	Average Speed (feet/sec)	Speed Increment (feet/sec)	Average Acceleration (feet/sec/sec)
	5	400				
	10	1600				
	15	3600				
	20	6400				
	25	10000				
	30	14400				

