



Graph of your walk from the parking lot to the library.
Aftermin. of walking, you stopped for ~ min.
For the first 3 min. your speed was?
It took you min. to return to your car after you stopped.
Your speed wason your return trip.
You stayed at your car min.
It took you min. to walk to the library on your 2 nd attemp

You leave home on Friday afternoon for your weekend getaway. Heavy traffic slows you down for the first half of your trip but you make good time for the last half.

Graphically express your distance from home as a function of time.



Your new job pays \$10 per hour. After 6 months, you receive a promotion that gives you a wage increase of \$5 per hour. 1) Sketch a graph of your wage over your first year.

Time (min)	8:03 AM	8:04 AM	8:05 AM	8:06 AM	8:07 AM		
Height (ft)	36,000	32,800	29,600	26,400	23,200		
Notice how this date doesn't start at zero.							
To write an equation, you need a y-intercept.							
It is often easier to change the time to read "time <u>since</u> " some reference point.							
22.110 10							
Time (min) (since 8:03	0 3 AM)	1	2	3	4		



		\sim				
	Time (min)	0	1	2	3	4
	Height (ft)	36,000	32,000	28,000	24,000	20,000
(The table shows the altitude of an airplane.)						
`	rita aquation:		h		,	
W	ne equation.	y – 111x +	- D		4000	ff
	→ what is the second secon	ie slope?) m –	rise	= -4000	<i></i>
		•	m -	run	min	
				run	mm	
١٨	(bat is the v int	torcont 2		(0 h)	(0 360	00)
vv	riacis ule y-illi	ercept :		(0, 0)	(0, 500	00)
	v = -4000x	+ 3600	0			
	,					
	TEST your eq	uation	32 000	= -4 000)(1) + 36	000
	<u>1201</u> Joan oq	aation.	52,000		(1) 1 30	,000
			Fo	nuation i	e "truo"	

What is the equation of the line that can represent this data? 11:30 12:30 Time 11 AM AM 12 PM ΡM 1 PM distance 50 75 100 150 125 (miles)

Time (min)	0	1	2	3	4
Height (ft)	500	450	400	350	300
Year	1900	1910	1920	1930	1940
Population					
(millions)	100	125	150	175	200

Find the equa	ation tha	ıt "models	" the data.		
Time (yrs)	1987	1991	1995	1999	2003
Trade deficit (Billions of \$'s)	36.0	32.8	29.6	26.4	23.2
			1	1	



During the first 5 weeks of your exercise program you record your weight.						
End of Week, w	0	1	2	3	4	5
weight, y (lb.)	186	183	180	177	174	171

Determine the average rate of change of your weight during the 5-week period.

Assuming your weight loss will continue at the same rate, write an equation that relates your weight to the number of weeks on the exercise program.



You decide to buy a new Honda Civic, but you are concerned
about the value of the car depreciating over time. You search
the Internet and obtain the following information.
Suggested Retail Price: \$20,905

Depreciation per year: \$1750 (assume constant)

1) What does this mean?

2) Complete the table.

"V" is the value of the car after "n" years of ownership

n (years)	0	1	2	3	5	8
V, (\$)						

3) Write the equation that predicts the value of the car based upon its age in the year.

<u>A car rental company charges:</u> \$60 per day plus \$0.75 per mile You decide the rent the car for a day. Fill in the remainder of the table.

Write the equation that predicts the cost of renting the car based upon how many miles are driven.

 $C_A(m) = 0.75m + 60$

How much would your bill be if you drove the car 525 miles?

Hamburgers cost \$5 and drinks cost \$2.

If you can spend a total of \$50, fill in the total number of hamburgers and drinks that you can buy.

drinks

Write and equation for this table.