Write the equation in slope intercept form.	Write the equation of the line that is perpendicular to ▓▓▓▓▓▓ and contains the point ▓▓▓▓
1. contains the points ____ and	2.

NUMERICALLY

A physics student obtains the following data involving a ball rolling down an inclined plane, where t is the elapsed time in seconds and y is the distance traveled in inches.

time (second)
Distance (inches

t	0	1	2	3	4	5
y	0	0.6	2.4	5.4	10.2	20

3. What is the average velocity of the ball for the indicated <u>time interval</u>? $0-5$ $m = \frac{\Delta y}{\Delta x} = \frac{(20)-(0)}{(5)-(0)} = \frac{20}{5} = 4\ in/sec$

4. Which interval was the ball travelling fastest?   *The interval from 4 to 5*

5. Predict the distance at 6 seconds. Justify your prediction.
   29.28 inches. The quadratic regression predicted it

L1	**L2**	**L3**
Year	**Subscribers (millions)**	**Average Local Monthly Bill ($)**
1988	1.6	95.00
1989	2.7	85.52
1990	4.4	83.94
1991	6.4	74.56
1992	8.9	68.51
1993	13.1	67.31
1994	19.3	58.65
1995	28.2	52.45
1996	38.2	48.84
1997	48.7	43.86
1998	60.8	39.88
1999	76.3	40.24
2000	97.0	45.15
2001	118.4	45.56

$Reg\ (L_1, L_2, Y_1)$

$Reg\ (L_1, L_3, Y_2)$