	0	5	10	15	20	25	30
Years since 1970							
Households with Color TV's (millions)	21	47	63	78	90	94	101

The table shows the number of U.S. households with color TV's from 1970 to 2000.

a) Find a quadratic model to represent the situation.

b) Using the model, in what year did 52 million households in the U.S. have color TV's?

c) In 1997, how many U.S. households had color TV?

The time it takes for a clock's pendulum to swing from one side to the other is called the pendulum's period. The table shows the period, t, in seconds, and the length of the pendulum, l, in feet.

Period, t (sec)	1	2	3	4	5
Length, l (feet)	.82	3.28	7.38	13.12	20.5

a) Find a quadratic model to represent the situation.

b) How good a fit is the quadratic model?

c) Find the length of the pendulum that has a period of 0.5 seconds.