Height of a Softball A softball is dropped from a height of about 8 feet. The height of the softball is recorded 26 times at intervals of 0.02 second. The results are shown in the table.

Time, x	Height, y
0.00	7.99103
0.02	7.94464
0.04	7.93615
0.06	7.89673
0.08	7.87322
0.10	7.84443
0.12	7.80874
0.14	7.79095
0.16	7.75392
0.18	7.64898
0.20	7.54421
0.22	7.43125
0.24	7.30098
0.26	7.16875
0.28	7.02674
0.30	6.83874
0.32	6.67460
0.34	6.51484
0.36	6.26931
0.38	6.07766
0.40	5.85357
0.42	5.59485
0.44	5.32125
0.46	5.05561
0.48	4.76833
0.50	4.48594

(a) Use a graphing utility to create a scatter plot of the data.

(b) Describe the trend in the data.

(c) Use the *regression* feature of a graphing utility to find a quadratic model for the data.

(d) Use a graphing utility to plot the data and graph the model from part (c) in the same viewing window. Is the model a good fit? Explain.

(e) Use the model to predict when the softball will hit the ground.