Sales per Share The table shows the sales per share S (in dollars) for Kohl's Corporation from 1995 through 2012. (Source: Kohl's Corp.)

DATA

Spreadsheet at LarsonPrecalculus.com

Year	Sales per share, S
1995	6.53
1996	8.08
1997	9.70
1998	11.62
1999	13.97
2000	18.52
2001	22.35
2002	27.04
2003	30.23
2004	34.08
2005	38.84
2006	48.43
2007	53.06
2008	53.73
2009	55.95
2010	63.20
2011	76.13
2012	86.84

(a) Use the *linear regression*, *quadratic regression*, and *exponential regression* features of a graphing utility to find a linear model, a quadratic model, and an exponential model for the data. Let t represent the year, with $t = 5$ corresponding to 1995.

(b) Use a graphing utility to plot the data and graph each model from part (a) in the same viewing window.

(c) Which model do you think best fits the data? Explain your reasoning.

(d) For each model, find the r^2-value (the coefficient of determination) determined by the graphing utility. Use the results to choose which model best fits the data. Compare your results with part (c). (Recall that the coefficient of determination gives a measure of how well a model fits a data set. The closer the value of the coefficient of determination is to 1, the better the fit.)

(e) Use the model that best represents the data to predict the sales per share for Kohl's in 2021.