

Example 1. The following table gives the number (in thousands) of laptops sold per month after it is released. Show work and give **units** for each answer.

# of months after it released	2	4	6	8	10	12	14
# laptops sold (thousand) per month	580	560	540	330	200	140	120

(a). Let x stand for the number of months after the laptops released, and let $f(x)$ stand for the number of laptops (in thousands) sold per month. Fit **the best model** to the data. Round all coefficients to 3 decimal places.

(b). According to the model in part (a), how many laptops are sold in the 7 months? in the 11 months? Round to 1 laptops.

(c). Use the model in part (a) to approximate the *average rate of change* of laptops sold per month between the 7 months and the 11 months.

Example 2. The following data shows a company spending on marketing in these years. Show work and give **units** for each answer.

year	2008	2009	2010	2011	2012	2013	2014
Spending(million dollars)	23.07	24.47	26.21	30.36	38.31	46.38	57.96

(a). Let x stand for the number of years since 2007, and let $g(x)$ stand for the money spending on market in millions. Fit **the best model** to the data. Round all coefficients to 3 decimal places.

(b). Use the model in part (a) to estimate the company spending on market in millions in 2015.

How the models looks like

