

Multiple linear regression

Task 1.. A real estate agent would like to predict the selling price of single-family homes. After careful consideration, he concludes that the variables likely to be most closely related to selling price are: the size of the house (in 100s ft²). and the age of the house. As an experiment, he takes a random sample of fifteen recently sold houses and records the selling price (in \$ 1,000s). These are shown in the accompanying table. Find and interpret the linear regression model (Dependent variable- Selling Price). Predict the selling price when: house size is 100, age- 10.

House size	Selling Price	Age (years)
20	89,5	5
14,8	79,9	10
20,5	83,1	8
12,5	56,9	7
18	66,6	8
14,3	82,5	12
27,5	126,3	1
16,5	79,3	10
24,3	119,9	2
20,2	87,6	8
22	112,6	7
19	120,8	11
12,3	78,5	16
14	74,3	12
16,7	74,8	13

Task 2. A real estate agent would like to predict the selling price of single-family homes. After careful consideration, he concludes that the variables likely to be most closely related to selling price are: the size of the house, age (in 100s ft²). of the house and lot size(in 1000s ft²). As an experiment, he takes a random sample of fifteen recently sold houses and records the selling price (in \$ 1,000s). These are shown in the accompanying table. Find and interpret the linear regression model (Dependent variable- Selling Price). Predict the selling price when house size is 100, age- 10, lot size- 5.

House size	Selling Price	Age (years)	Lot size
20	89,5	5	4,1
14,8	79,9	10	6,8
20,5	83,1	8	6,3
12,5	56,9	7	5,1
18	66,6	8	4,2
14,3	82,5	12	8,6
27,5	126,3	1	4,9
16,5	79,3	10	6,2
24,3	119,9	2	7,5
20,2	87,6	8	5,1
22	112,6	7	6,3
19	120,8	11	12,9
12,3	78,5	16	9,6
14	74,3	12	5,7
16,7	74,8	13	4,8