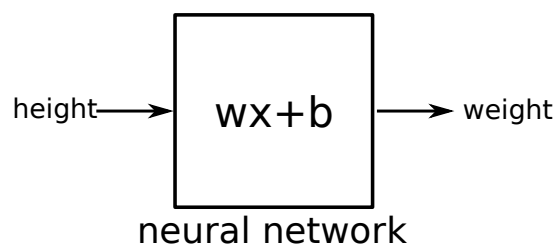


Lesson 4 (Simple Linear Regression II) What is the weight of a child who is 70 inches tall? Below is a table of the heights (in inches) and the weights (in pounds) of 10 randomly selected children.³ Use MSE (L^2) loss function to train the neural network shown below. Use the approach outlined below.

height	weight
67	128
67	123
72	129
69	143
69	132
70	142
67	112
67	118
66	108
68	119



- (a) Solve the normal equations to determine the optimal values for w and b .
- (b) Show that the solution to the normal equations gives a simple neural network with lower RMSE than that determined from a contour plot of RMSE.

³Data source: [SOCR Data](#)