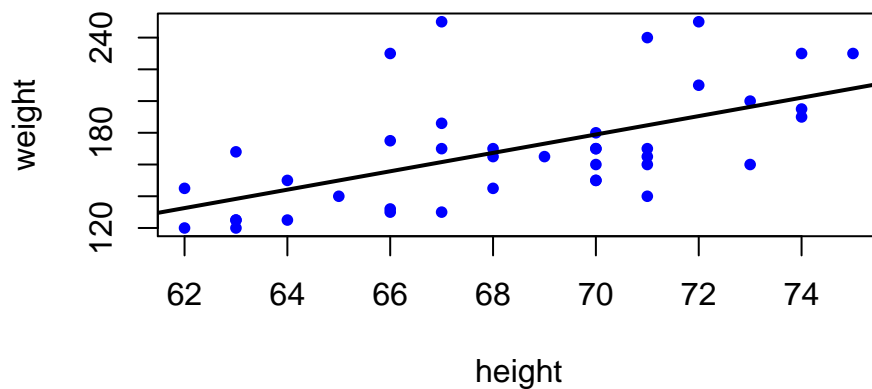


Stat 185 - A regression problem

1. The figure below shows a scatter plot of weight (in pounds) vs height (in inches) for a random sample 40 American men and the table shows linear regression table for that same data. We are curious if there is a relationship between height and weight.



	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	-226.9576	89.4932	-2.54	0.0154
height	5.7984	1.3065	4.44	0.0001

- (a) Write down the hypothesis statement that we would check with this linear model.
- (b) Write out the formula for linear model.
- (c) What does the model predict for the weight of a man who is 70 inches tall?
- (d) State the conclusion of the hypothesis test from part (c).