

Predict chance of being male given weight. Regress using a logistic model with an Ordinary-Least-Squares fit.

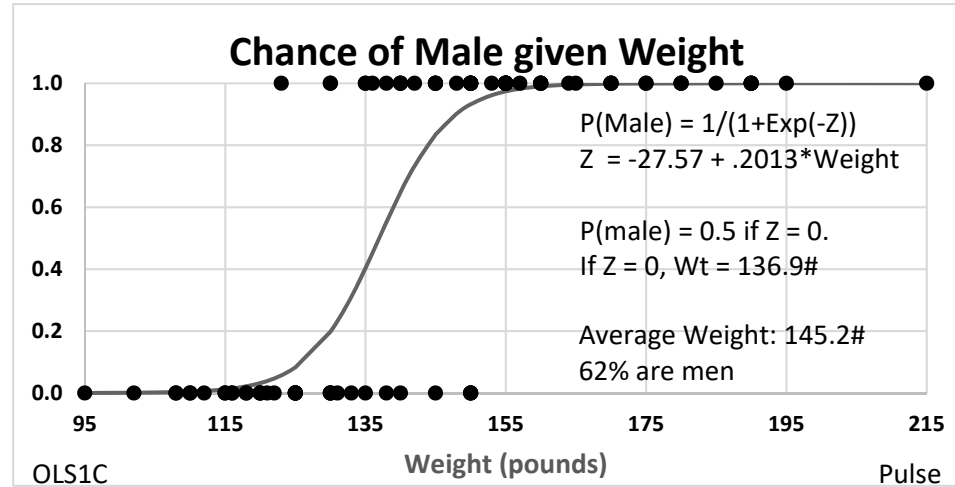
C7 =IF(B7=0, 0.001, 0.999)

E7 =LN(D7)

D7 =C7/(1-C7)

F7 =1/(1+EXP(-I\$33-I\$34*A7))

A	B	C	D	E	F
Weight	Male	Male1	Odds	LN(Odds)	yPred
95	0	0.001	0.001	-6.91	0.000
102	0	0.001	0.001	-6.91	0.001
108	0	0.001	0.001	-6.91	0.003
108	0	0.001	0.001	-6.91	0.003
110	0	0.001	0.001	-6.91	0.004
110	0	0.001	0.001	-6.91	0.004
112	0	0.001	0.001	-6.91	0.007
115	0	0.001	0.001	-6.91	0.012
115	0	0.001	0.001	-6.91	0.012
116	0	0.001	0.001	-6.91	0.015
116	0	0.001	0.001	-6.91	0.015
118	0	0.001	0.001	-6.91	0.022
118	0	0.001	0.001	-6.91	0.022
120	0	0.001	0.001	-6.91	0.032
120	0	0.001	0.001	-6.91	0.032
120	0	0.001	0.001	-6.91	0.032
121	0	0.001	0.001	-6.91	0.039
122	0	0.001	0.001	-6.91	0.047
123	1	0.999	999.000	6.91	0.057
125	0	0.001	0.001	-6.91	0.083
125	0	0.001	0.001	-6.91	0.083
125	0	0.001	0.001	-6.91	0.083
125	0	0.001	0.001	-6.91	0.083
130	0	0.001	0.001	-6.91	0.198
130	1	0.999	999.000	6.91	0.198
130	0	0.001	0.001	-6.91	0.198
130	0	0.001	0.001	-6.91	0.198



SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.708667
R Square	0.5022089
Adjusted R Square	0.4966779
Standard Error	4.7839195
Observations	92

ANOVA

	df	SS	MS	F	ignificance F
Regression	1	2078.01	2078.01	90.79874	2.73E-15
Residual	90	2059.73	22.88589		
Total	91	4137.739			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	-27.56682	3.106615	-8.87359	6.31E-14	-33.7387	-21.395
Weight	0.2012952	0.021125	9.528837	2.73E-15	0.159327	0.24326