

# Some Notes About the Homework

- If you want to go over the homework in detail, figure out the source of a coding error, etc. email me and we can go through it or you can email me.
- Adding more terms to a model will *always* make the confidence interval increase
- For models with more than one term (i.e. the model with a linear and a squared term) you have to add the coefficients together to calculate the change in Y for a for a one-unit increase in X.
- “Coefficient”:

```
> summary(glm(Survived ~ Age + Sex, family=binomial(link='logit'),data=train))
```

Call:

```
glm(formula = Survived ~ Age + Sex, family = binomial(link = "logit"),  
     data = train)
```

Deviance Residuals:

Min	1Q	Median	3Q	Max
-1.7405	-0.6885	-0.6558	0.7533	1.8989

Coefficients:

	Estimate	Std. Error	z value	Pr(> z )	
(Intercept)	1.277273	0.230169	5.549	2.87e-08	***
Age	-0.005426	0.006310	-0.860	0.39	
Sexmale	-2.465920	0.185384	-13.302	< 2e-16	***

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Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 964.52 on 713 degrees of freedom  
Residual deviance: 749.96 on 711 degrees of freedom  
(177 observations deleted due to missingness)  
AIC: 755.96

Number of Fisher Scoring iterations: 4

```
> |
```