

So, we want to know whether Height is predicted by Gender.

Height ~ Gender

So, we fit a linear model like this:

```
ourmodel <- lm(height ~ gender, data = genderheightdata)
```

The model is stored in the variable `ourmodel`

```
> ourmodel <- lm(height ~ gender, data = genderheightdata)
> summary(ourmodel)
```

```
Call:
lm(formula = height ~ gender, data = genderheightdata)
```

```
Residuals:
```

```
      Min       1Q   Median       3Q      Max
-7.500 -3.125  0.000   3.125   7.500
```

```
Coefficients:
```

	Estimate	Std. Error	t value	Pr(> t )	
(Intercept)	165.000	2.700	61.104	1.29e-09	***
gendermale	12.500	3.819	3.273	0.017	*

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

```
Residual standard error: 5.401 on 6 degrees of freedom
Multiple R-squared:  0.641, Adjusted R-squared:  0.5812
F-statistic: 10.71 on 1 and 6 DF, p-value: 0.01696
```

We have a significant predictor (Gender) and model (indicated by the F-ratio).

