

March 31, 2016

```
> summary(model)
```

Call:

```
lm(formula = child ~ mom)
```

Residuals:

Min	1Q	Median	3Q	Max
-7.9852	-1.5897	0.4103	2.0671	5.0148

Coefficients:

	Estimate	Std. Error	t value	Pr(> t )
(Intercept)	31.0849	13.4396	2.313	0.02710 *
mom	0.6045	0.2041	2.962	0.00563 **

---

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

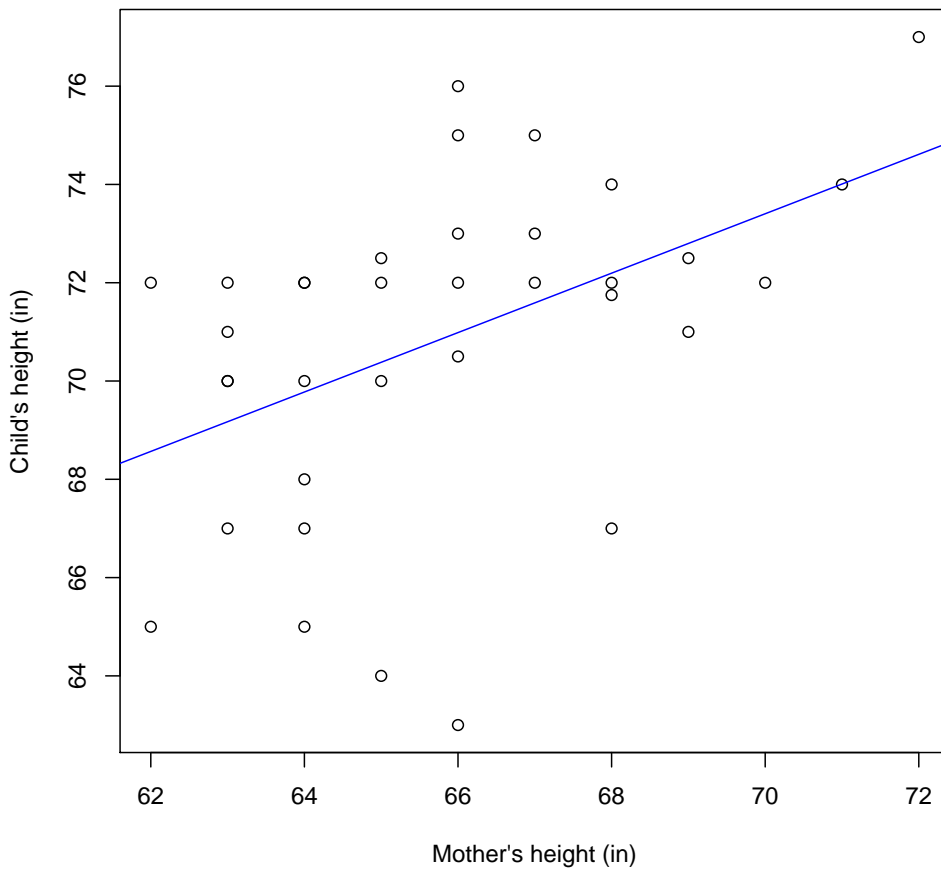
Residual standard error: 3.011 on 33 degrees of freedom

Multiple R-squared: 0.21, Adjusted R-squared: 0.1861

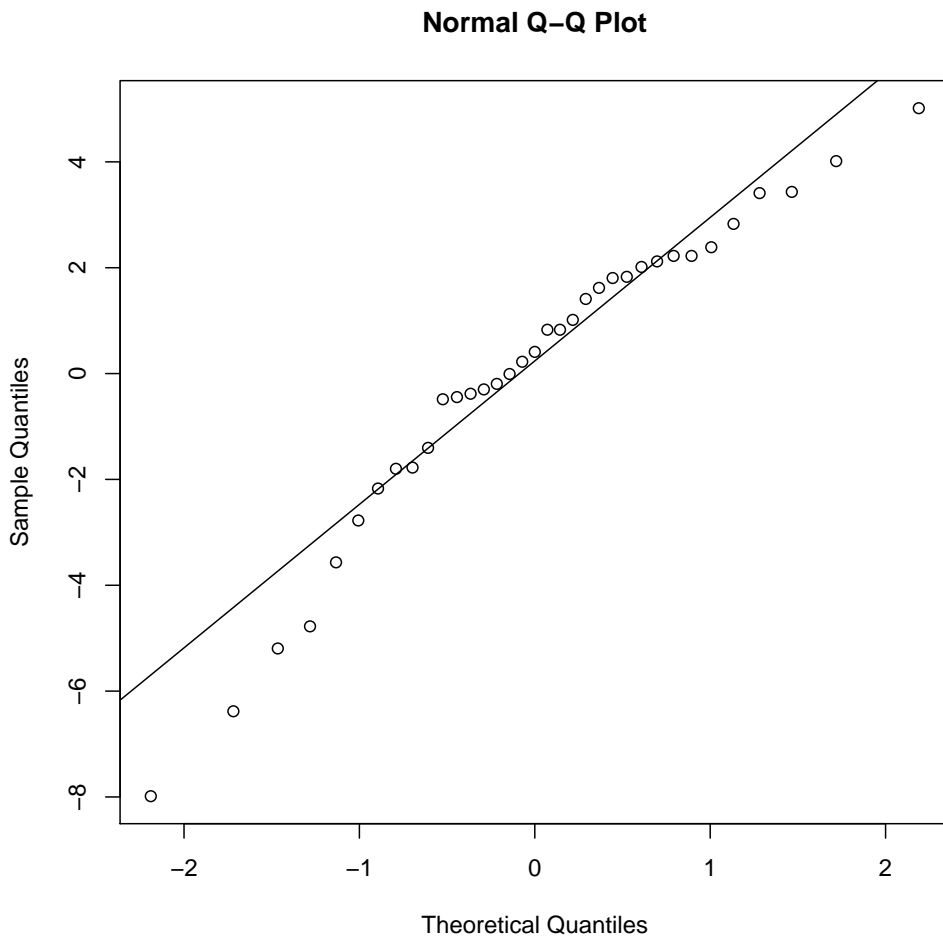
F-statistic: 8.773 on 1 and 33 DF, p-value: 0.00563

```
> plot(mom,child,xlab="Mother's height (in)",ylab="Child's height (in)")
```

```
> abline(model, col="blue")
```



```
> qqnorm(model$residuals)
> qqline(model$residuals)
```



```

> aov(model)
Call:
  aov(formula = model)

Terms:
              mom Residuals
Sum of Squares  79.5285 299.1393
Deg. of Freedom    1      33

Residual standard error: 3.010785
Estimated effects may be unbalanced

> summary(aov(model))
      Df Sum Sq Mean Sq F value Pr(>F)
mom     1  79.53   79.53   8.773 0.00563 **
Residuals 33 299.14    9.06
---
Signif. codes:  0 *** 0.001 ** 0.01 * 0.05 . 0.1 1

> anova(model)
Analysis of Variance Table

Response: child
      Df Sum Sq Mean Sq F value Pr(>F)
mom     1  79.529   79.529   8.7733 0.00563 **
Residuals 33 299.139    9.065
---
Signif. codes:  0 *** 0.001 ** 0.01 * 0.05 . 0.1 1

> summary(anova(model))
      Df      Sum Sq      Mean Sq      F value
Min.   : 1   Min.   : 79.53   Min.   : 9.065   Min.   :8.773
1st Qu.: 9   1st Qu.:134.43   1st Qu.:26.681   1st Qu.:8.773
Median :17   Median :189.33   Median :44.297   Median :8.773
Mean   :17   Mean   :189.33   Mean   :44.297   Mean   :8.773
3rd Qu.:25   3rd Qu.:244.24   3rd Qu.:61.913   3rd Qu.:8.773
Max.   :33   Max.   :299.14   Max.   :79.528   Max.   :8.773
      NA's :1

      Pr(>F)
Min.   :0.00563
1st Qu.:0.00563
Median :0.00563
Mean   :0.00563
3rd Qu.:0.00563
Max.   :0.00563
NA's   :1

```