Anscombe's Data

```
head(anscombe, nrow = 2)
```

```
## # A tibble: 6 x 10
##      x1    x2    x3    x4    x5    y1    y2    y3    y4    y5
##   <dbl> <dbl> <dbl> <dbl> <dbl> <dbl> <dbl> <dbl> <dbl> <dbl>
## 1    10    10    10     8    10  8.04  9.14  7.46  6.58  6.60
## 2     8     8     8     8     8  6.95  8.14  6.77  5.76  7.14
## 3    13    13    13     8    13  7.58  8.74 12.7   7.71  7.33
## 4     9     9     9     8     9  8.81  8.77  7.11  8.84  8.72
## 5    11    11    11     8    11  8.33  9.26  7.81  8.47  7.57
## 6    14    14    14     8    14  9.96  8.1   8.84  7.04 11.6
```

```
fit1 <- lm(y1 ~ x1, data = anscombe)
summary(fit1)
```

```
##
## Call:
## lm(formula = y1 ~ x1, data = anscombe)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -1.92127 -0.45577 -0.04136  0.70941  1.83882
##
## Coefficients:
##             Estimate Std. Error t value Pr(>|t|)
## (Intercept)   3.0001     1.1247   2.667  0.02573 *
## x1            0.5001     0.1179   4.241  0.00217 **
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.237 on 9 degrees of freedom
## Multiple R-squared:  0.6665, Adjusted R-squared:  0.6295
## F-statistic: 17.99 on 1 and 9 DF,  p-value: 0.00217
```

```
fit2 <- lm(y2 ~ x2, data = anscombe)
summary(fit2)
```

```
##
## Call:
## lm(formula = y2 ~ x2, data = anscombe)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -1.9009 -0.7609  0.1291  0.9491  1.2691
##
## Coefficients:
##             Estimate Std. Error t value Pr(>|t|)
## (Intercept)    3.001      1.125   2.667  0.02576 *
## x2             0.500      0.118   4.239  0.00218 **
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.237 on 9 degrees of freedom
## Multiple R-squared:  0.6662, Adjusted R-squared:  0.6292
## F-statistic: 17.97 on 1 and 9 DF,  p-value: 0.002179
```

```
fit3 <- lm(y3 ~ x3, data = anscombe)
summary(fit3)
```

```
##
## Call:
## lm(formula = y3 ~ x3, data = anscombe)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -1.1586 -0.6146 -0.2303  0.1540  3.2411
##
## Coefficients:
##             Estimate Std. Error t value Pr(>|t|)
## (Intercept)   3.0025     1.1245   2.670  0.02562 *
## x3            0.4997     0.1179   4.239  0.00218 **
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.236 on 9 degrees of freedom
## Multiple R-squared:  0.6663, Adjusted R-squared:  0.6292
## F-statistic: 17.97 on 1 and 9 DF,  p-value: 0.002176
```

```
fit4 <- lm(y4 ~ x4, data = anscombe)
summary(fit4)
```

```
##
## Call:
## lm(formula = y4 ~ x4, data = anscombe)
##
## Residuals:
##    Min     1Q Median     3Q    Max
## -1.751 -0.831  0.000  0.809  1.839
##
## Coefficients:
##             Estimate Std. Error t value Pr(>|t|)
## (Intercept)   3.0017     1.1239   2.671  0.02559 *
## x4            0.4999     0.1178   4.243  0.00216 **
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.236 on 9 degrees of freedom
## Multiple R-squared:  0.6667, Adjusted R-squared:  0.6297
## F-statistic:    18 on 1 and 9 DF,  p-value: 0.002165
```

```
fit5 <- lm(y5 ~ x5, data = anscombe)
summary(fit5)
```

```
##
## Call:
## lm(formula = y5 ~ x5, data = anscombe)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -2.15970 -0.54305 -0.05691  0.83472  1.56679
##
## Coefficients:
##             Estimate Std. Error t value Pr(>|t|)
## (Intercept)   3.0022     1.1247   2.669   0.0256 *
## x5            0.4988     0.1179   4.231   0.0022 **
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 1.237 on 9 degrees of freedom
## Multiple R-squared:  0.6655, Adjusted R-squared:  0.6283
## F-statistic:  17.9 on 1 and 9 DF,  p-value: 0.002203
```