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Call:
lm(formula = wl3 ~ group, data = df)

Residuals:
   Min     1Q Median     3Q    Max
-1.250 -1.083 -0.200  0.800  1.917

Coefficients:
            Estimate Std. Error t value Pr(>|t|)
(Intercept)  2.17778    0.20218  10.772 5.27e-12 ***
groupDiet    0.04722    0.14071   0.336    0.739
groupDietEx -0.02500    0.25146  -0.099    0.921
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Residual standard error: 1.175 on 31 degrees of freedom
Multiple R-squared:  0.004064,  Adjusted R-squared:  -0.06019
F-statistic: 0.06325 on 2 and 31 DF,  p-value: 0.9388
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- The average amount of weight lost in the control group sample was 2.17778 pounds.
- On average, in the sample, individuals in the control group did better (in terms of weight loss) than individuals in the diet and exercise group (DietEx).
- The average amount of weight lost in the diet group sample was 2.225 pounds.
- The average amount of weight lost in the diet group sample was 0.04722 pounds.
- On average, in the sample, individuals in the diet and exercise group (DietEx) gained weight.

3. In the one-way ANOVA regression model, the intercept term β_0 is the expected response in the baseline/reference/control group.

- True
- False

- There is statistical evidence that there are population level differences with respect to the mean weight loss across diet and exercise groups.
- There is statistical evidence that there are sample level differences with respect to the mean weight loss across diet and exercise groups.

4. Consider a one-way ANOVA regression model with a factor of five levels: a control group and four treatments.

$$Y_i = \beta_0 + \sum_{j=1}^{4} \beta_j X_{i,j} + \varepsilon_i.$$

The mean of the response variable in the third treatment group is $\beta_0 + \beta_3$.

- True
- False

5. Consider a one-way ANOVA regression model with a factor of five levels: a control group and four treatments.

$$Y_i = \beta_0 + \sum_{j=1}^{4} \beta_j X_{i,j} + \varepsilon_i.$$

The mean of the response variable in the third treatment group is β_3.

- True
- False