## **Regression Analysis**

## **Regression Equation**

Final Score (%) = 92.881 - 0.00381 Min. of Study

## **Model Summary**

S R-sq R-sq(adj) R-sq(pred) 4.67275 2.49% 1.29% 0.00%

## **Analysis of Variance**

| Source     | DF | SS      | MS      | F    | P     |
|------------|----|---------|---------|------|-------|
| Regression | 1  | 45.24   | 45.2436 | 2.07 | 0.154 |
| Error      | 81 | 1768.60 | 21.8346 |      |       |
| Total      | 82 | 1813.84 |         |      |       |

## **Analysis of Variance**

| Source        | DF | Adj SS  | Adj MS | F-Value | P-Value |
|---------------|----|---------|--------|---------|---------|
| Regression    | 1  | 45.24   | 45.24  | 2.07    | 0.154   |
| Min. of Study | 1  | 45.24   | 45.24  | 2.07    | 0.154   |
| Error         | 81 | 1768.60 | 21.83  |         |         |
| Lack-of-Fit   | 42 | 1076.84 | 25.64  | 1.45    | 0.124   |
| Pure Error    | 39 | 691.76  | 17.74  |         |         |
| Total         | 82 | 1813.84 |        |         |         |

## Fits and Diagnostics for Unusual Observations

# Final Obs Score (%) Fit Resid Std Resid 6 81.15 91.97 -10.82 -2.33 R 7 80.85 92.54 -11.69 -2.52 R 16 80.85 92.88 -12.03 -2.61 R 37 85.05 89.34 -4.29 -1.01 X 56 89.50 90.06 -0.56 -0.13 X 62 94.05 90.35 3.70 0.83 X 75 81.85 92.40 -10.55 -2.27 R

R Large residual X Unusual X

| Min. of<br>Study | Final<br>Score<br>(%) |
|------------------|-----------------------|
| 120              | 95.6                  |
| 180              | 95                    |
| 0                | 95.1                  |
| 330              | 98.35                 |
| 0                | 93.3                  |
| 240              | 81.15                 |
| 90               | 80.85                 |
| 330              | 93.8                  |
| 0                | 97.5                  |
| 120              | 92.1                  |
| 0                | 91.25                 |
| 0                | 94.05                 |
| 0                | 95.8                  |
| 0                | 96.95                 |
| 210              | 94.7                  |
| 0                | 80.85                 |
| 0                | 97.3                  |
| 0                | 91.55                 |
| 360              | 94                    |
| 120              | 93.85                 |
| 240              | 97.85                 |
| 0                | 97.15                 |
|                  |                       |

| 210 | 95.15 |
|-----|-------|
| 0   | 96.8  |
| 370 | 91.65 |
| 150 | 91.8  |
| 270 | 85.9  |
| 315 | 97.15 |
| 190 | 91.35 |
| 270 | 92.5  |
| 165 | 98.5  |
| 0   | 95.65 |
| 150 | 88.55 |
| 285 | 92.35 |
| 30  | 91.3  |
| 150 | 87.05 |
| 930 | 85.05 |
| 200 | 88.45 |
| 190 | 85.2  |
| 240 | 94.55 |
| 625 | 97.3  |
| 635 | 97.6  |
| 210 | 97.2  |
| 510 | 90.65 |
| 425 | 85.4  |
| 410 | 84.55 |
| 350 | 94.45 |
|     |       |

| 330 | 88.35 |
|-----|-------|
| 120 | 86.95 |
| 225 | 88.45 |
| 105 | 93.25 |
| 185 | 95.2  |
| 445 | 86.85 |
| 0   | 96.55 |
| 0   | 96.85 |
| 740 | 89.5  |
| 290 | 94.9  |
| 185 | 93    |
| 85  | 88.45 |
| 390 | 91.7  |
| 495 | 94.6  |
| 665 | 94.05 |
| 200 | 83.95 |
| 450 | 84.75 |
| 140 | 90.9  |
| 70  | 98.35 |
| 85  | 93.85 |
| 40  | 95.3  |
| 120 | 91.25 |
| 155 | 87.35 |
| 500 | 93.3  |
| 85  | 95.45 |
|     |       |

| 120 | 84.2  |
|-----|-------|
| 0   | 92.75 |
| 125 | 81.85 |
| 390 | 87.35 |
| 40  | 98.15 |
| 365 | 98.65 |
| 35  | 90.7  |
| 120 | 93.25 |
| 0   | 96.8  |
| 85  | 88.25 |
| 175 | 94.4  |

# **Descriptive Statistics**

# **Statistics**

| Variable        | Ν  | N* | Mean   | SE Mean | StDev | Minimum | Q1     | Median | Q3     | Maximum |
|-----------------|----|----|--------|---------|-------|---------|--------|--------|--------|---------|
| Min. of Study   | 83 | 0  | 207.0  | 21.4    | 194.8 | 0.0     | 40.0   | 165.0  | 330.0  | 930.0   |
| Final Score (%) | 83 | 0  | 92.092 | 0.516   | 4.703 | 80.850  | 88.450 | 93.250 | 95.600 | 98.650  |

### **Method of Collection**

Sample: Every students in the four classes of NTCS-A Manager's Course at Dam Neck, Virginia (apparently, seems like a census for just NTCS-A Manager's Cource student; direct control).

How sample was obtained: Just include "everyone." It's a census of every students in this specific four classes of NTCS-A Manager's Course.

Sample size: Four classes, 83 students; whole population.

Population: The entire sample

## The Purpose

The purpose of this study is to determine the correlation between extra time of studying after school and the final percentage grade earned by the students in NTCS-A Manager's Course located in Dam Neck, Virginia. This study was conducted to see if there were any effective ways to teach and prepare students to be productive crew members of the United State Naval vessel.

"Since the Navy spends huge amounts of time and money on training, it might be helpful for them to learn about relationships that may exist between homework and grades. This could allow them to maximize the money being spent on training and increase the readiness of their people." It may also "be used to improve the way school is taught and assure that the newly graduated students are better prepared when they return to the fleet."