### Stat 159 Homework 2

# Simple Regression Analysis

## Andrea Widjaja

Oct 07, 2016

### Abstract

In this report we reproduce the main results displayed in section 3.1 Simple Linear Regression (ch.3) of the book An Introduction to Statistical Learning.

## Introduction

The overall goal is to provide advice on how to improve sales of the particular product. Association..

#### Data

# Methodology

### Results

## Conclusions

Is there a relationship between advertising budget and sales? How strong is the relationship between advertising budget and sales? Which media contribute to sales? tv?

$$sales = \beta_0 + \beta_1 * TV$$

linear relationship, regressing Y onto X:

$$Y = \beta_0 + \beta_1 X$$

# Linear Regression

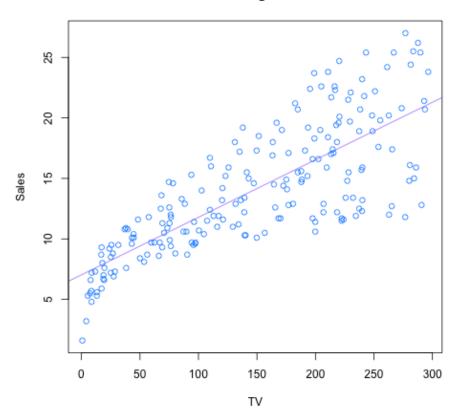


Figure 1: TV Sales Scatterplot