

```

> Original <- c(1030, 1035, 1020, 1049, 1028, 1026, 1019, 1010)
> mean(Original)
[1] 1027.125
> sd(Original)
[1] 11.71614
> var(Original)
[1] 137.2679
> plot(Original, type = "b", pch = 16, col = "green", main =
"Original Rubber Compound", ylab = "Tensile strength (psi)")
> plot(Original, 1:8, main = "Original Rubber Compound", xlab =
"Tensile strength (psi)", ylab = "", type = "n", yaxt = "n", frame =
FALSE)
> points(Original, rep(1, 8), pch = 16, col = "green")

> Modified <- c(1037, 1047, 1066, 1048, 1059, 1073, 1070, 1040)
> mean(Modified)
[1] 1055
> sd(Modified)
[1] 13.87701
> var(Modified)
[1] 192.5714
> RubberCompounds <- c(Original, Modified)
> plot(RubberCompounds, type = "b", pch = 16, col = "green", main
= "Original versus Modified Rubber Compounds", ylab = "Tensile
strength (psi)")
> plot(RubberCompounds, 1:16, main = "Original versus Modified
Rubber Compounds", xlab = "Tensile strength (psi)", ylab = "", type
= "n", yaxt = "n", frame = FALSE)
> points(RubberCompounds, c(rep(1, 8), rep(2, 8)), pch = 16, col =
"green")

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```
> PullStrength <- c(9.95, 24.45, 31.75, 35.00, 25.02, 16.86, 14.38,  
9.60, 24.35, 27.50, 17.08, 37.00, 41.95, 11.66, 21.65, 17.89, 69.00,  
10.30, 34.93, 46.59, 44.88, 54.12, 56.63, 22.13, 21.15)  
> WireLength <- c(2, 8, 11, 10, 8, 4, 2, 2, 9, 8, 4, 11, 12, 2, 4, 4, 20,  
1, 10, 15, 15, 16, 17, 6, 5)  
> DieHeight <- c(50, 110, 120, 550, 295, 200, 375, 52, 100, 300,  
412, 400, 500, 360, 205, 400, 600, 585, 540, 250, 290, 510, 590,  
100, 400)  
> WireBond <- cbind(PullStrength, WireLength, DieHeight)  
> WireBond  
  
> plot(WireLength, PullStrength, main = "Wire Bond", xlab = "Wire  
length (X1)", ylab = "Pull strength (Y)", pch = 16, col = "green")  
> plot(DieHeight, PullStrength, main = "Wire Bond", xlab = "Die  
height (X2)", ylab = "Pull strength (Y)", pch = 16, col = "green")
```