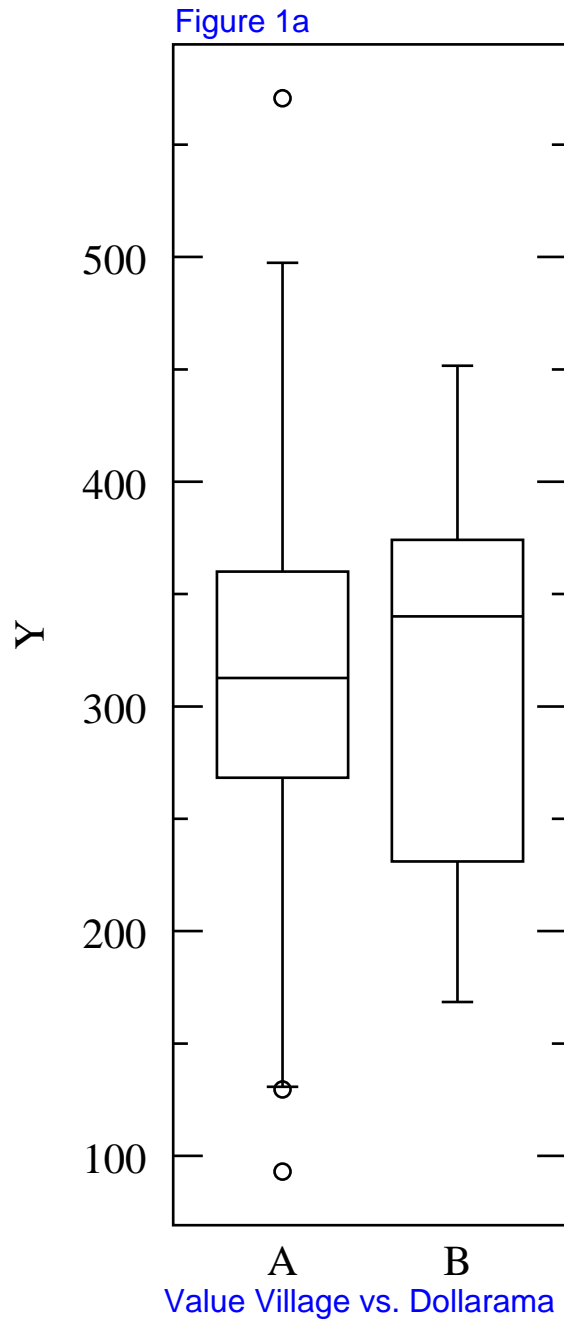


# Appendix 1: Statistical Data on Ceramic Vessel Attributes and Boxplots

Mass (g) Value Village vs. Dollarama



$t = -0.300$

$sdev = 76.0$

degrees of freedom = 80 The probability of this result, assuming the null hypothesis, is 0.76

Group A: Number of items = 61

Mean = 316.

95% confidence interval for Mean: 296.8 thru 335.5

Standard Deviation = 74.2

Hi = 571. Low = 93.0

Median = 313.

Average Absolute Deviation from Median = 53.1

Group B: Number of items = 21

Mean = 322.

95% confidence interval for Mean: 288.9 thru 355.0

Standard Deviation = 81.3

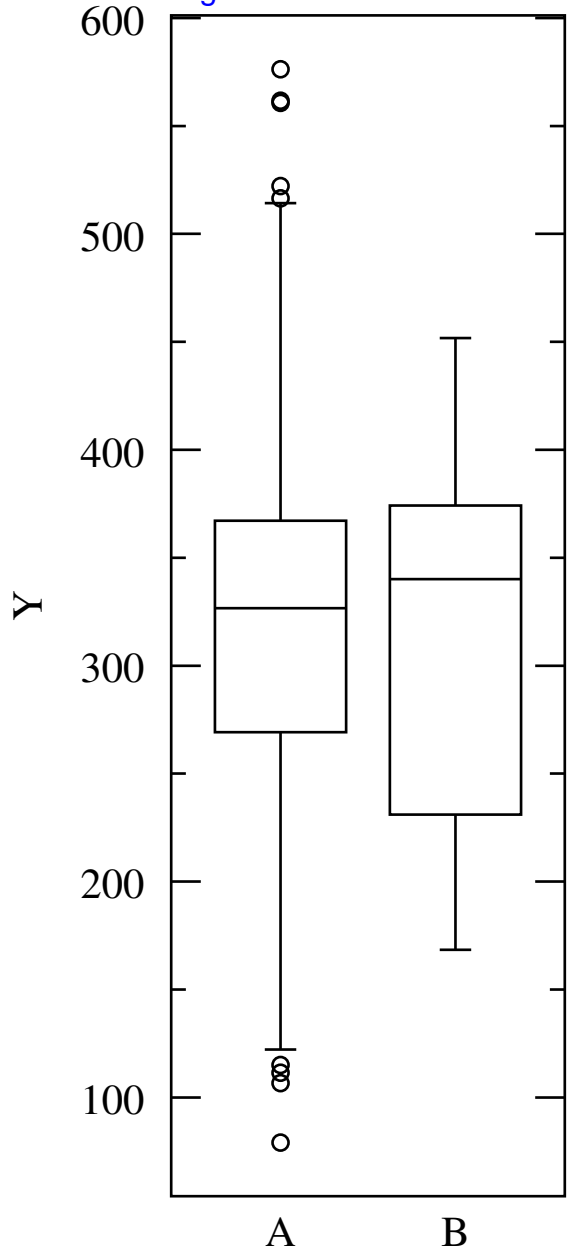
Hi = 452. Low = 168.

Median = 340.

Average Absolute Deviation from Median = 63.2

# Mass (g) Non-Dollarama vs. Dollarama

Figure 1b



Non-Dollarama vs. Dollarama

$t=-0.153$

sdev= 80.9

degrees of freedom =226 The probability of this result, assuming the null hypothesis, is 0.88

Group A: Number of items= 207

Mean = 319.

95% confidence interval for Mean: 308.0 thru 330.2

Standard Deviation = 80.8

Hi = 576. Low = 79.1

Median = 327.

Average Absolute Deviation from Median = 60.3

Group B: Number of items= 21

Mean = 322.

95% confidence interval for Mean: 287.2 thru 356.7

Standard Deviation = 81.3

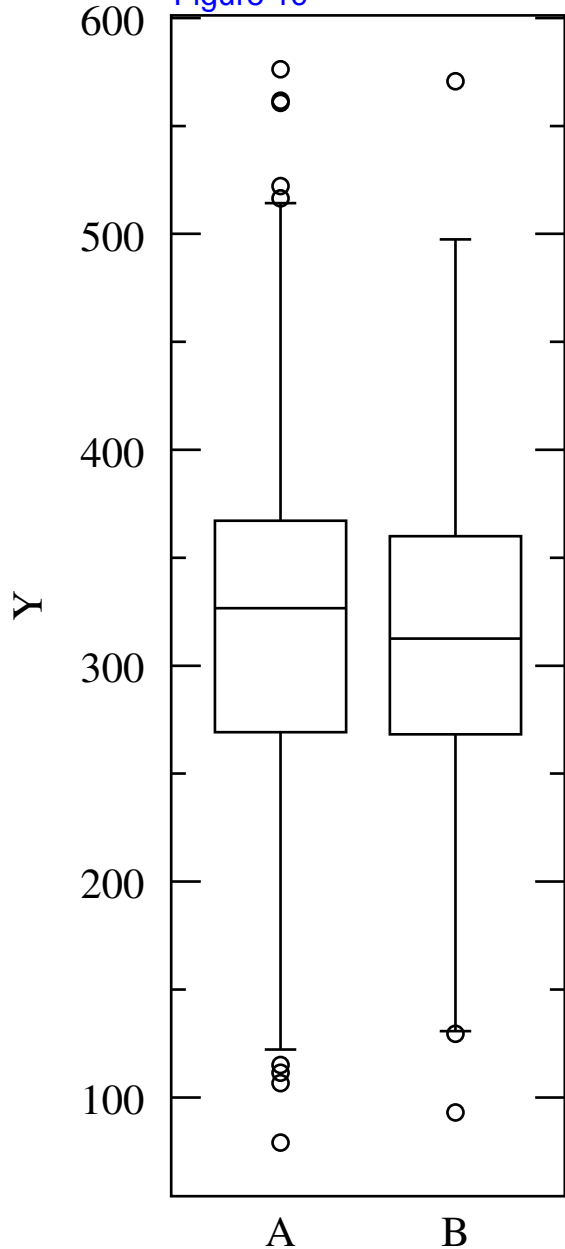
Hi = 452. Low = 168.

Median = 340.

Average Absolute Deviation from Median = 63.2

Mass (g) Non-Dollarama vs. Value Village

Figure 1c



Non-Dollarama vs. Value Village

t= 0.254

sdev= 79.4

degrees of freedom =266 The probability of this result, assuming the null hypothesis, is 0.80

Group A: Number of items= 207

Mean = 319.

95% confidence interval for Mean: 308.2 thru 330.0

Standard Deviation = 80.8

Hi = 576. Low = 79.1

Median = 327.

Average Absolute Deviation from Median = 60.3

Group B: Number of items= 61

Mean = 316.

95% confidence interval for Mean: 296.2 thru 336.2

Standard Deviation = 74.2

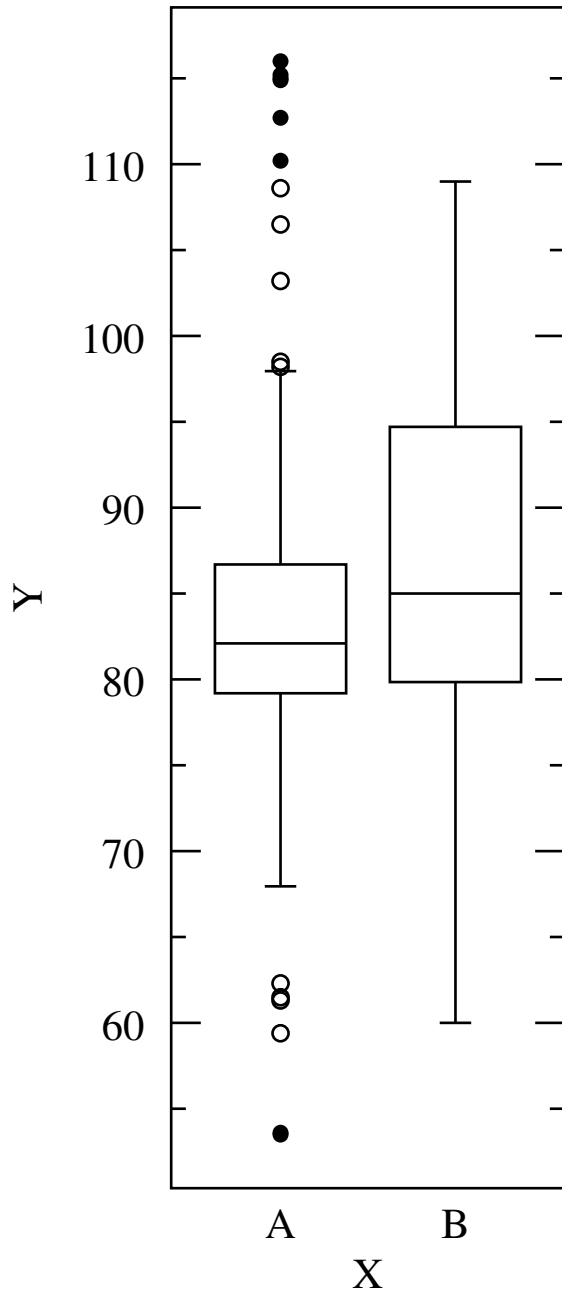
Hi = 571. Low = 93.0

Median = 313.

Average Absolute Deviation from Median = 53.1

Top External Diameter (mm) Non-Dollarama vs. Dollarama

Figure 2a



Non-Dollarama vs. Dollarama

t= -1.98

sdev= 9.61

degrees of freedom =226 The probability of this result, assuming the null hypothesis, is 0.049

Group A: Number of items= 207

Mean = 83.0

95% confidence interval for Mean: 81.70 thru 84.33

Standard Deviation = 9.33

Hi = 116. Low = 53.5

Median = 82.1

Average Absolute Deviation from Median = 6.12

Group B: Number of items= 21

Mean = 87.4

95% confidence interval for Mean: 83.23 thru 91.49

Standard Deviation = 12.1

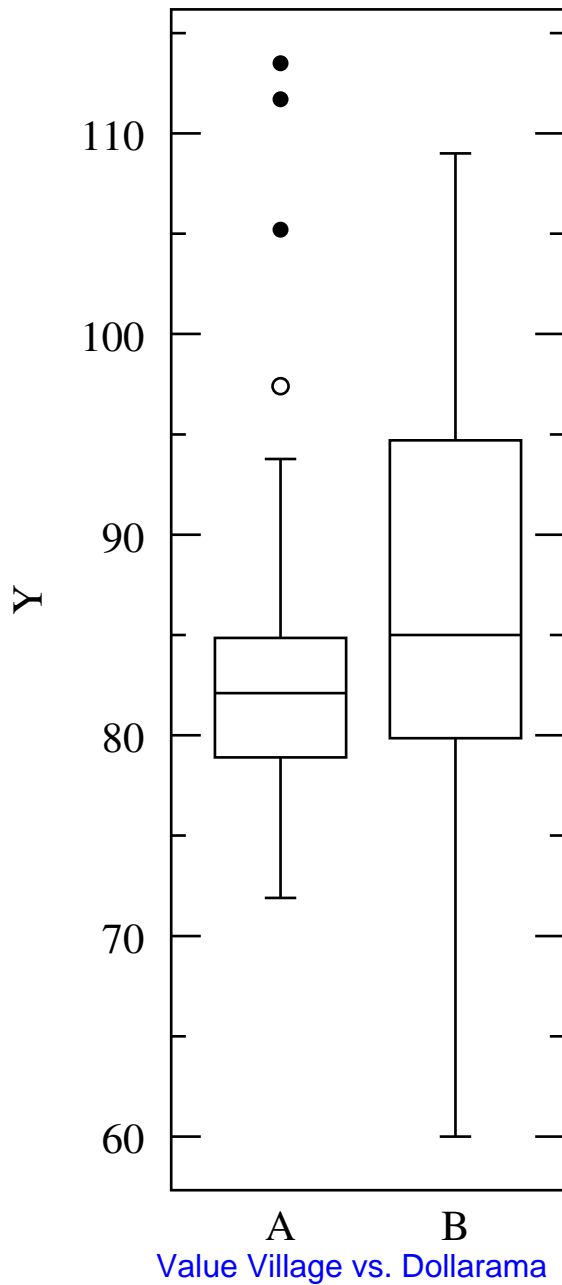
Hi = 109. Low = 60.0

Median = 85.0

Average Absolute Deviation from Median = 9.06

# Top External Diameter (mm) Value Village vs. Dollarama

Figure 2b



$t = -1.88$

sdev = 9.35

degrees of freedom = 80 The probability of this result, assuming the null hypothesis, is 0.064

Group A: Number of items = 61

Mean = 82.9

95% confidence interval for Mean: 80.53 thru 85.30

Standard Deviation = 8.24

Hi = 114. Low = 71.9

Median = 82.1

Average Absolute Deviation from Median = 5.24

Group B: Number of items = 21

Mean = 87.4

95% confidence interval for Mean: 83.30 thru 91.42

Standard Deviation = 12.1

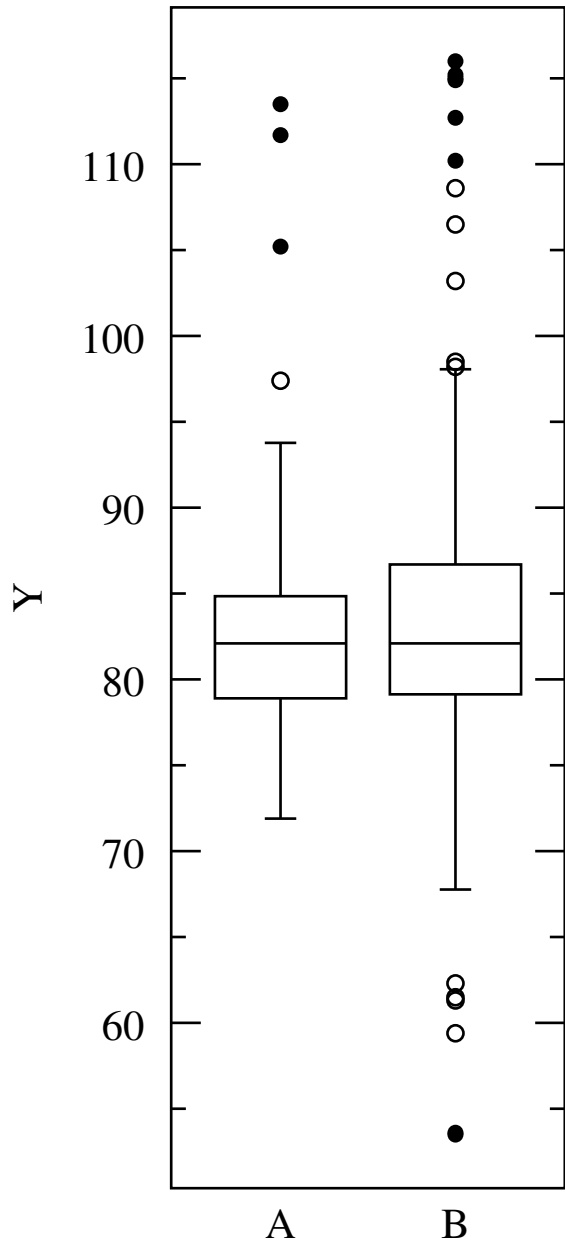
Hi = 109. Low = 60.0

Median = 85.0

Average Absolute Deviation from Median = 9.06

Top External Diameter (mm) Value Village vs. Non-Dollarama

Figure 2c



t=-0.523E-01  
sdev= 9.09  
degrees of freedom =267 The probability of this result, assuming the null hypothesis, is 0.96  
Group A: Number of items= 61

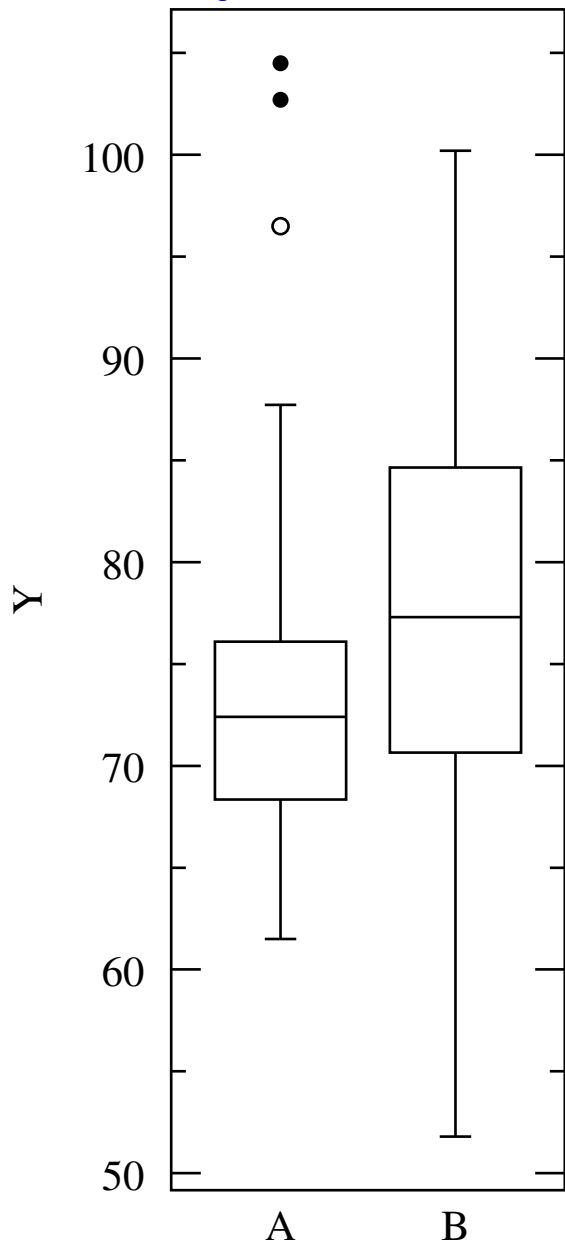
Mean = 82.9  
95% confidence interval for Mean: 80.63 thru 85.21  
Standard Deviation = 8.24  
Hi = 114. Low = 71.9  
Median = 82.1  
Average Absolute Deviation from Median = 5.24  
Group B: Number of items= 208

Mean = 83.0  
95% confidence interval for Mean: 81.74 thru 84.23  
Standard Deviation = 9.32  
Hi = 116. Low = 53.5  
Median = 82.1  
Average Absolute Deviation from Median = 6.11  
Data Reference: 0379

Value Village vs. Non-Dollarama

Top Internal Diameter (mm) Value Village vs. Dollarama

Figure 3a



Value Village vs. Dollarama

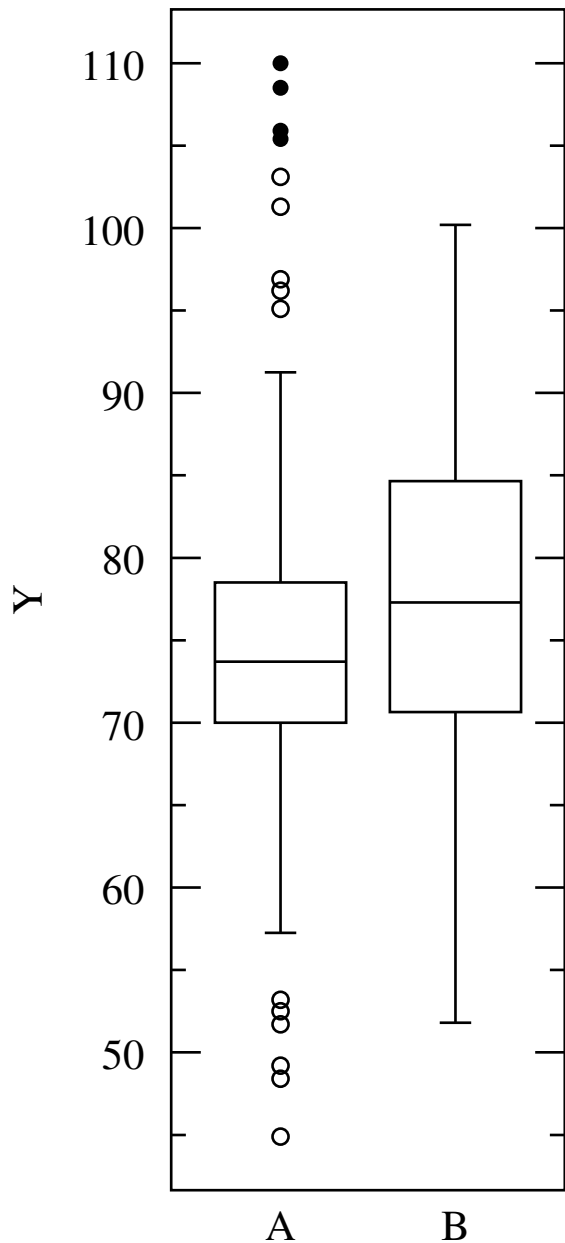
$t = -1.75$   
sdev = 9.07  
degrees of freedom = 80  
The probability of this result, assuming the null hypothesis, is 0.084

Group A: Number of items = 61  
Mean = 73.4  
95% confidence interval for Mean: 71.10 thru 75.72  
Standard Deviation = 8.15  
Hi = 104. Low = 61.5  
Median = 72.4  
Average Absolute Deviation from Median = 5.15

Group B: Number of items = 21  
Mean = 77.4  
95% confidence interval for Mean: 73.49 thru 81.37  
Standard Deviation = 11.4  
Hi = 100. Low = 51.8  
Median = 77.3  
Average Absolute Deviation from Median = 8.41

Top Internal Diameter (mm) Non-Dollarama vs. Dollarama

Figure 3b



Non-Dollarama vs. Dollarama

t= -1.34

sdev= 9.47

degrees of freedom =226 The probability of this result, assuming the null hypothesis, is 0.18

Group A: Number of items= 207

Mean = 74.5

95% confidence interval for Mean: 73.22 thru 75.81

Standard Deviation = 9.26

Hi = 110. Low = 44.9

Median = 73.7

Average Absolute Deviation from Median = 6.37

Group B: Number of items= 21

Mean = 77.4

95% confidence interval for Mean: 73.36 thru 81.50

Standard Deviation = 11.4

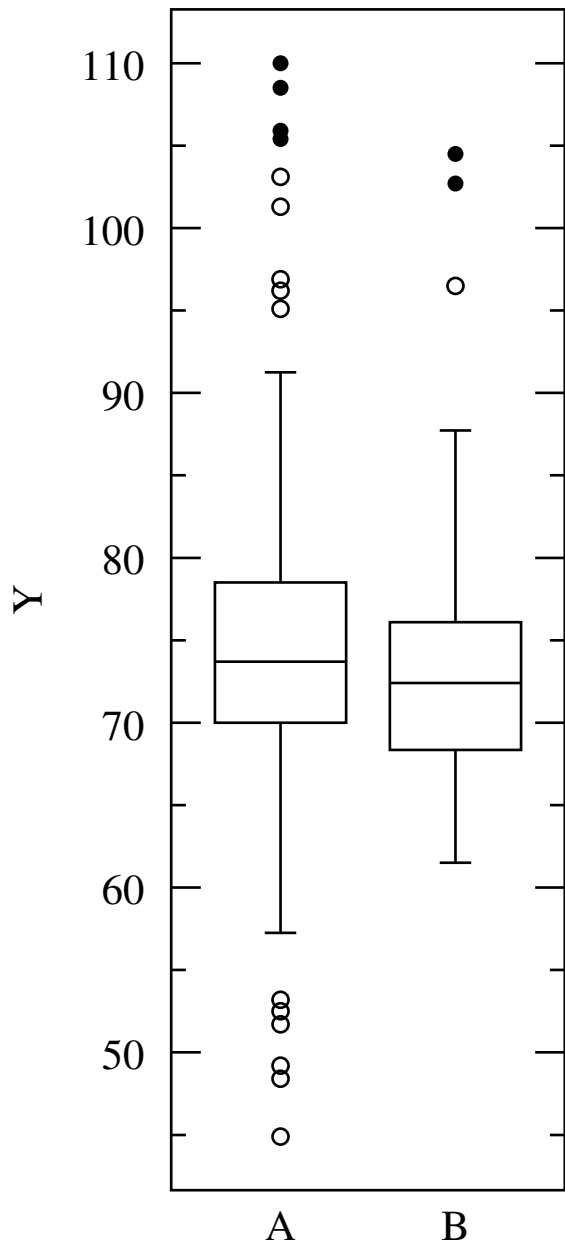
Hi = 100. Low = 51.8

Median = 77.3

Average Absolute Deviation from Median = 8.41

Top Internal Diameter (mm) Non-Dollarama vs. Value Village

Figure 3c



t= 0.839  
sdev= 9.02  
degrees of freedom =266 The probability of this result, assuming the null hypothesis, is 0.40

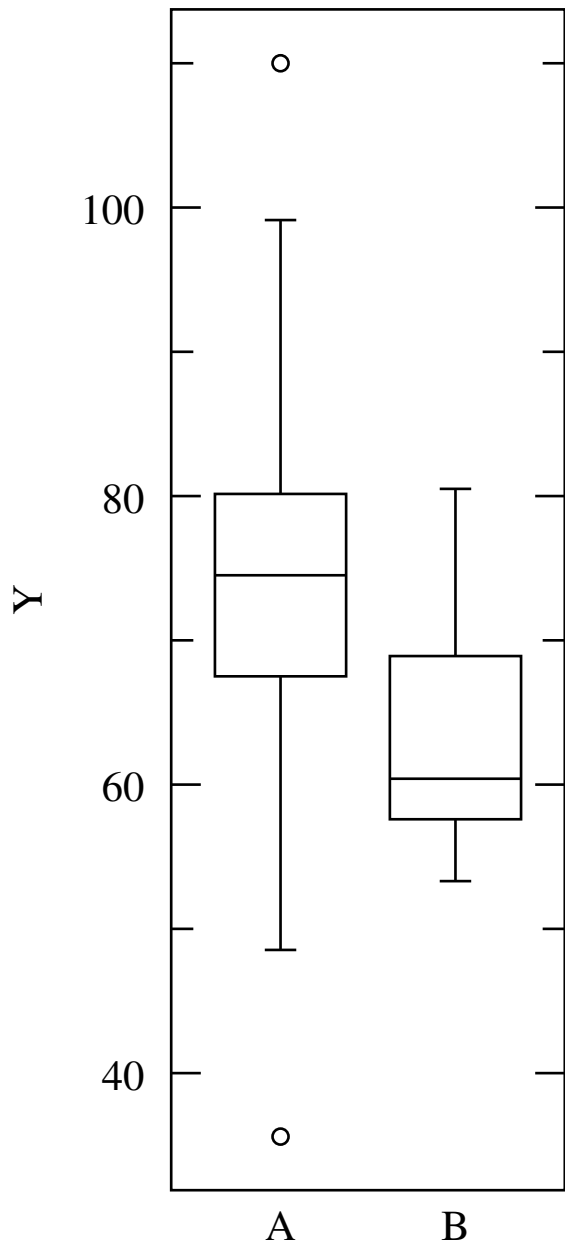
Group A: Number of items= 207  
Mean = 74.5  
95% confidence interval for Mean: 73.28 thru 75.75  
Standard Deviation = 9.26  
Hi = 110. Low = 44.9  
Median = 73.7  
Average Absolute Deviation from Median = 6.37

Group B: Number of items= 61  
Mean = 73.4  
95% confidence interval for Mean: 71.14 thru 75.69  
Standard Deviation = 8.15  
Hi = 104. Low = 61.5  
Median = 72.4  
Average Absolute Deviation from Median = 5.15  
Data Reference: 53F2

Non-Dollarama vs. Value Village

Base Diameters (mm) Value Village vs. Dollarama

Figure 4a



t= 3.63

sdev= 10.3

degrees of freedom = 80 The probability of this result, assuming the null hypothesis, is 0.0005

Group A: Number of items= 61

Mean = 72.9

95% confidence interval for Mean: 70.28 thru 75.52

Standard Deviation = 10.9

Hi = 110. Low = 35.6

Median = 74.5

Average Absolute Deviation from Median = 8.03

Group B: Number of items= 21

Mean = 63.5

95% confidence interval for Mean: 59.00 thru 67.93

Standard Deviation = 7.97

Hi = 80.5 Low = 53.3

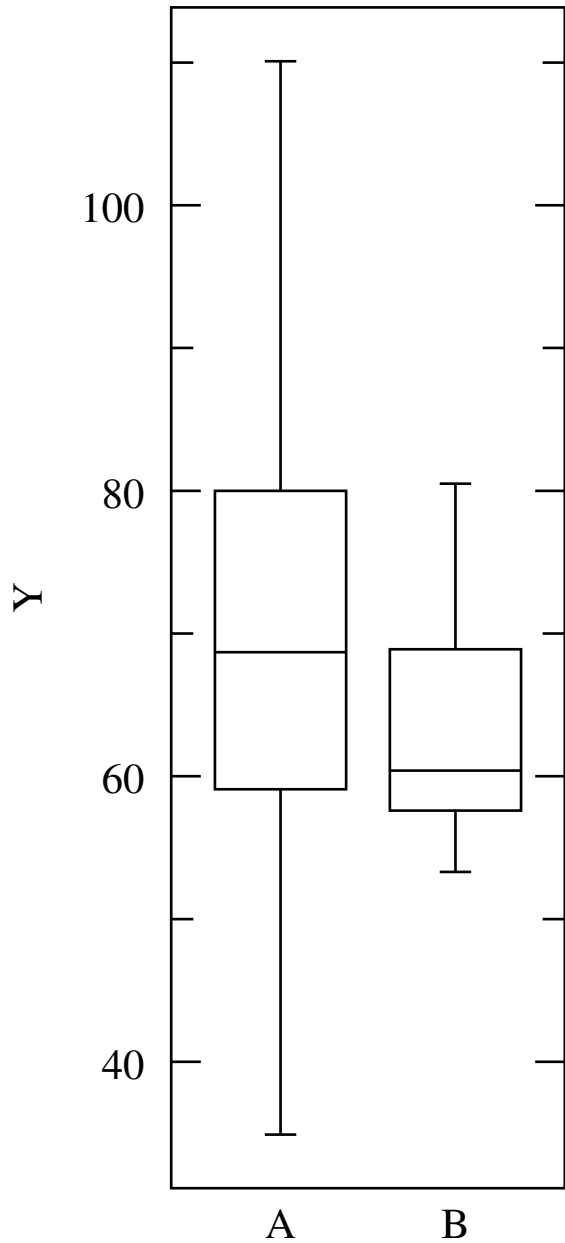
Median = 60.4

Average Absolute Deviation from Median = 5.59

Value Village vs. Dollarama

Base Diameters (mm) Non-Dollarama vs. Dollarama

Figure 4b



Non-Dollarama vs. Dollarama

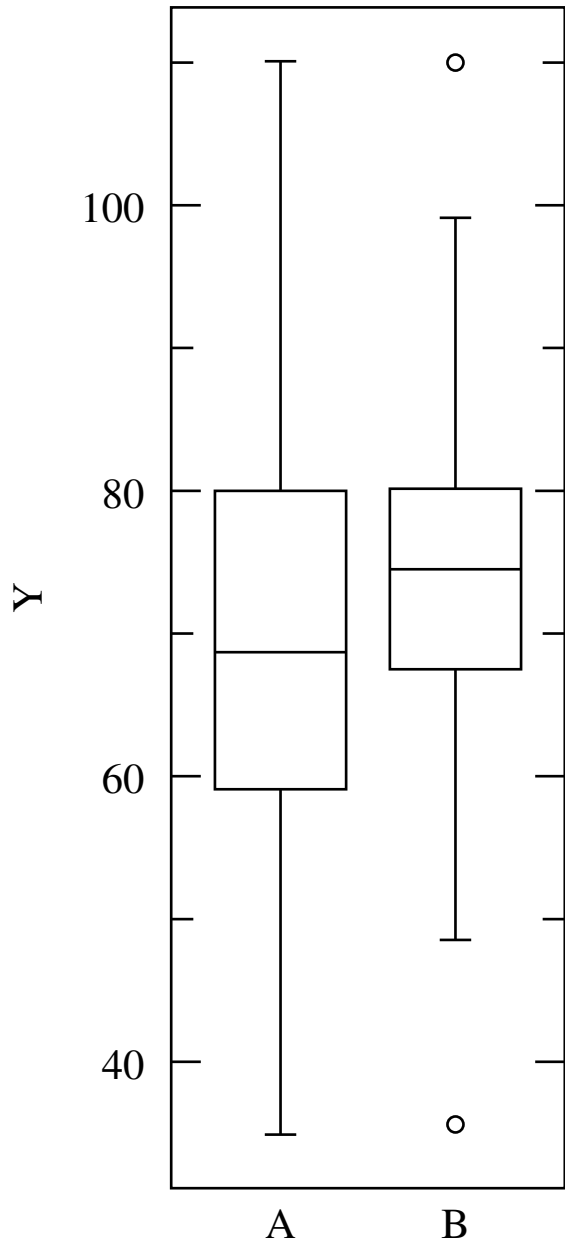
$t = 1.87$   
 $sdev = 12.0$   
degrees of freedom = 226 The probability of this result, assuming the null hypothesis, is 0.063

Group A: Number of items = 207  
Mean = 68.6  
95% confidence interval for Mean: 66.97 thru 70.26  
Standard Deviation = 12.3  
Hi = 110. Low = 34.9  
Median = 68.7  
Average Absolute Deviation from Median = 10.3

Group B: Number of items = 21  
Mean = 63.5  
95% confidence interval for Mean: 58.29 thru 68.63  
Standard Deviation = 7.97  
Hi = 80.5 Low = 53.3  
Median = 60.4  
Average Absolute Deviation from Median = 5.59

Base Diameters (mm) Non-Dollarama vs. Value Village

Figure 4c



$t = -2.44$   
 $sdev = 12.0$   
degrees of freedom = 266 The probability of this result, assuming the null hypothesis, is 0.015

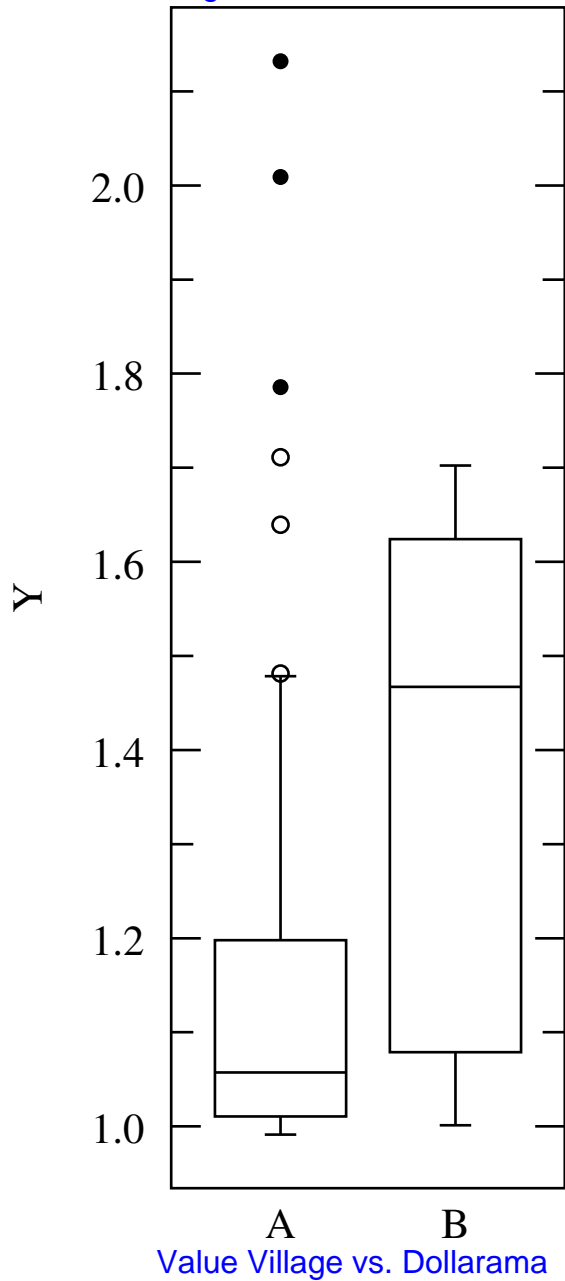
Group A: Number of items = 207  
Mean = 68.6  
95% confidence interval for Mean: 66.97 thru 70.26  
Standard Deviation = 12.3  
Hi = 110. Low = 34.9  
Median = 68.7  
Average Absolute Deviation from Median = 10.3

Group B: Number of items = 61  
Mean = 72.9  
95% confidence interval for Mean: 69.87 thru 75.94  
Standard Deviation = 10.9  
Hi = 110. Low = 35.6  
Median = 74.5  
Average Absolute Deviation from Median = 8.03

Non-Dollarama vs. Value Village

Ratio of Top/Bottom Value Village vs. Dollarama

Figure 5a



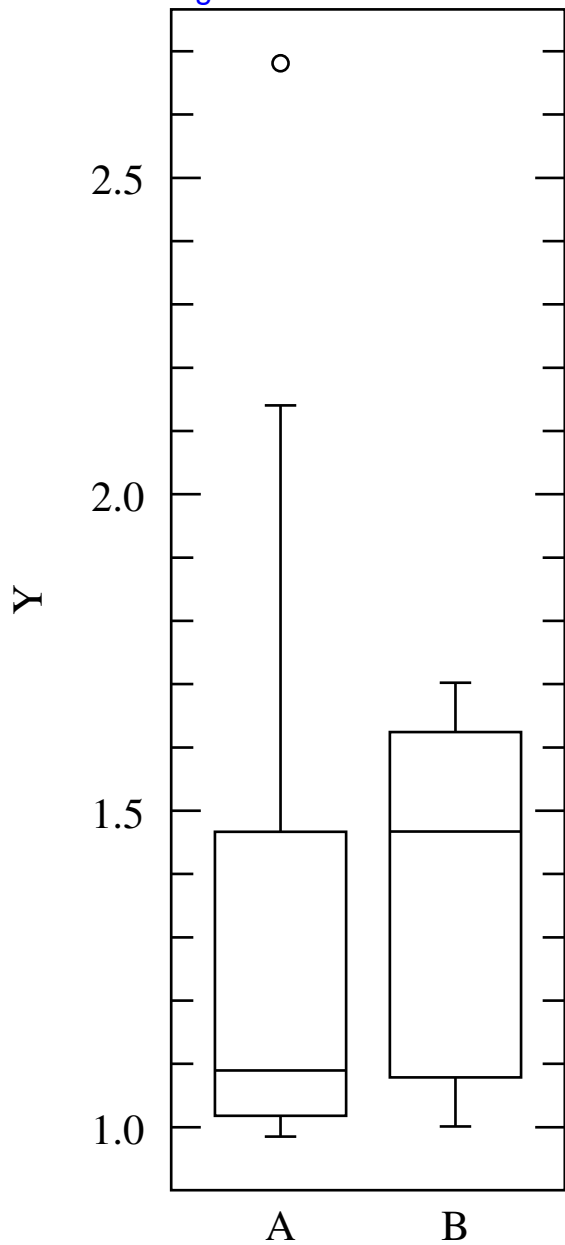
t= -3.60  
sdev= 0.253  
degrees of freedom = 80  
The probability of this result, assuming the null hypothesis, is 0.0006

Group A: Number of items= 61  
Mean = 1.17  
95% confidence interval for Mean: 1.103 thru 1.232  
Standard Deviation = 0.252  
Hi = 2.13 Low = 0.991  
Median = 1.06  
Average Absolute Deviation from Median = 0.151

Group B: Number of items= 21  
Mean = 1.40  
95% confidence interval for Mean: 1.288 thru 1.507  
Standard Deviation = 0.256  
Hi = 1.70 Low = 1.00  
Median = 1.47  
Average Absolute Deviation from Median = 0.207

# Ratio of Top/Bottom Non-Dollarama vs. Dollarama

Figure 5b



Non-Dollarama vs. Dollarama

t= -2.27

sdev= 0.281

degrees of freedom =226 The probability of this result, assuming the null hypothesis, is 0.024

Group A: Number of items= 207

Mean = 1.25

95% confidence interval for Mean: 1.213 thru 1.290

Standard Deviation = 0.283

Hi = 2.68 Low = 0.985

Median = 1.09

Average Absolute Deviation from Median = 0.225

Group B: Number of items= 21

Mean = 1.40

95% confidence interval for Mean: 1.277 thru 1.518

Standard Deviation = 0.256

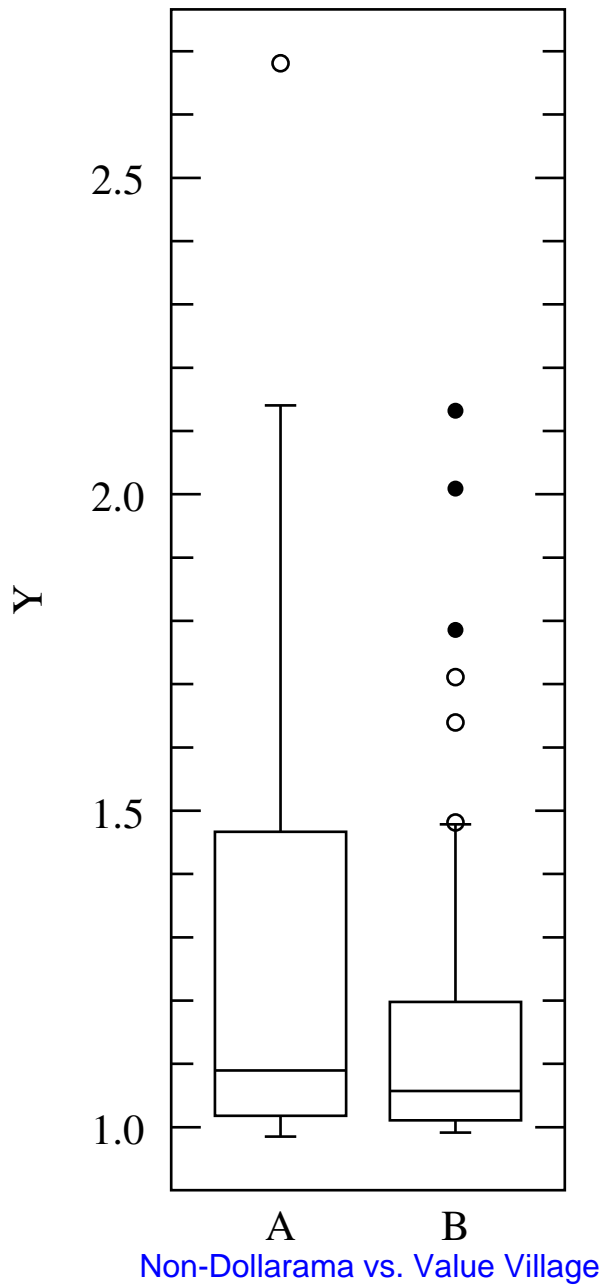
Hi = 1.70 Low = 1.00

Median = 1.47

Average Absolute Deviation from Median = 0.207

Ratio of Top/Bottom Non-Dollarama vs. Value Village

Figure 5c



t= 2.08

sdev= 0.276

degrees of freedom =266 The probability of this result, assuming the null hypothesis, is 0.039

Group A: Number of items= 207

Mean = 1.25

95% confidence interval for Mean: 1.214 thru 1.289

Standard Deviation = 0.283

Hi = 2.68 Low = 0.985

Median = 1.09

Average Absolute Deviation from Median = 0.225

Group B: Number of items= 61

Mean = 1.17

95% confidence interval for Mean: 1.098 thru 1.237

Standard Deviation = 0.252

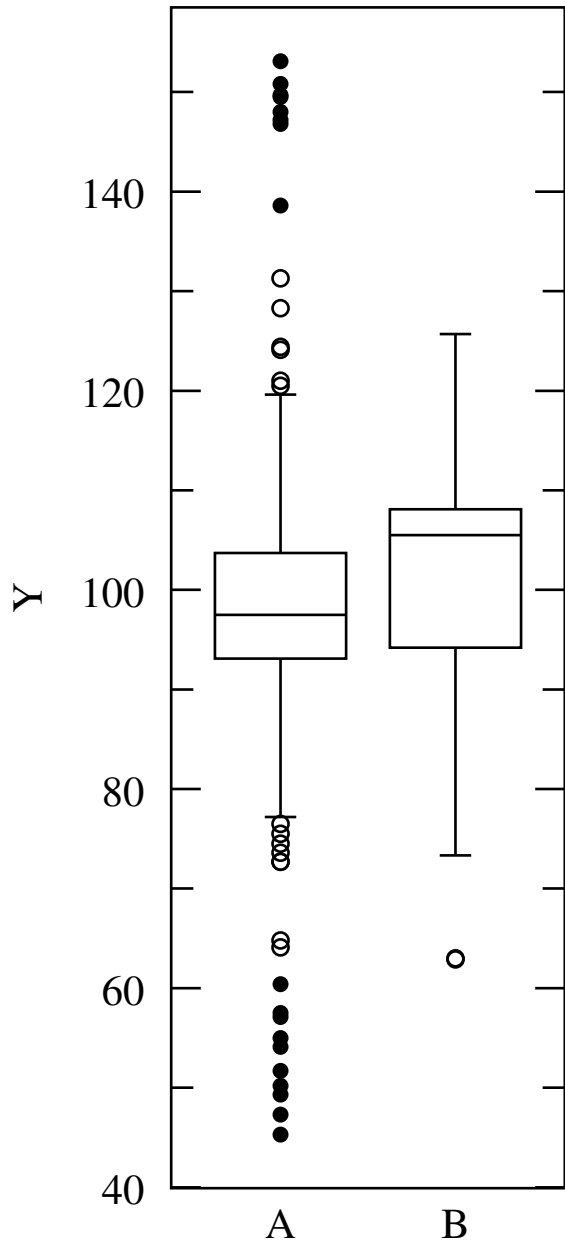
Hi = 2.13 Low = 0.991

Median = 1.06

Average Absolute Deviation from Median = 0.151

# Heights (mm) Non-Dollarama vs. Dollarama

Figure 6a



Non-Dollarama vs. Dollarama

$t=-0.350$

sdev= 17.1

degrees of freedom =226 The probability of this result, assuming the null hypothesis, is 0.73

Group A: Number of items= 207

Mean = 97.6

95% confidence interval for Mean: 95.28 thru 99.95

Standard Deviation = 17.2

Hi = 153. Low = 45.3

Median = 97.5

Average Absolute Deviation from Median = 10.7

Group B: Number of items= 21

Mean = 99.0

95% confidence interval for Mean: 91.65 thru 106.3

Standard Deviation = 15.5

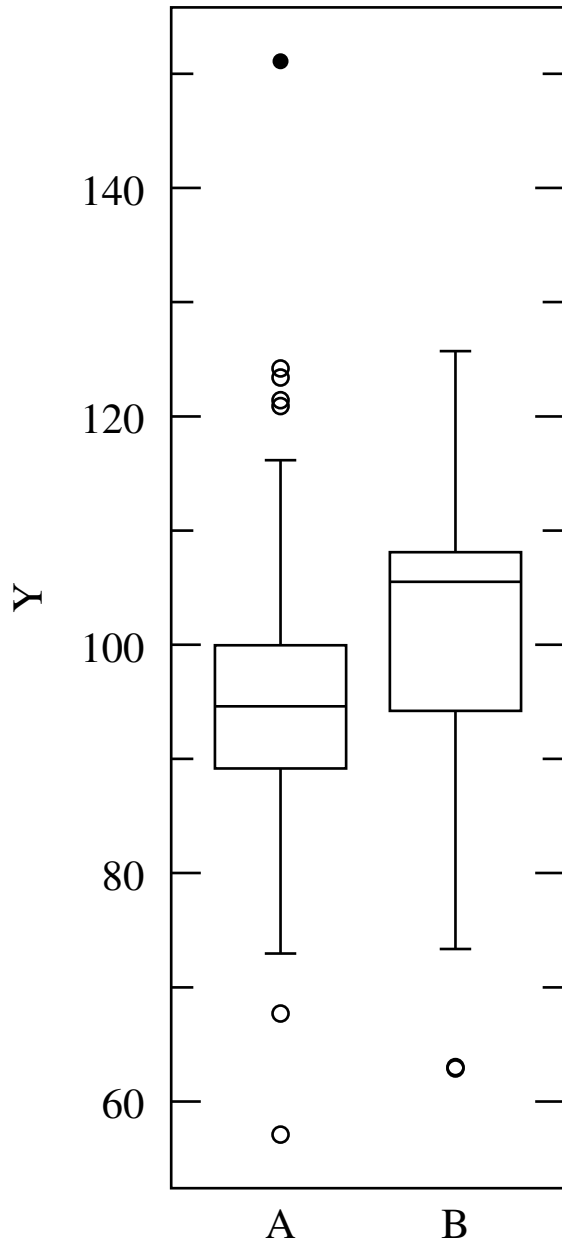
Hi = 126. Low = 62.9

Median = 106.

Average Absolute Deviation from Median = 10.4

# Heights (mm) Value Village vs. Dollarama

Figure 6b



Value Village vs. Dollarama

$t = -0.826$

$sdev = 14.1$

degrees of freedom = 80 The probability of this result, assuming the null hypothesis, is 0.41

Group A: Number of items = 61

Mean = 96.0

95% confidence interval for Mean: 92.45 thru 99.63

Standard Deviation = 13.6

Hi = 151. Low = 57.1

Median = 94.6

Average Absolute Deviation from Median = 8.78

Group B: Number of items = 21

Mean = 99.0

95% confidence interval for Mean: 92.87 thru 105.1

Standard Deviation = 15.5

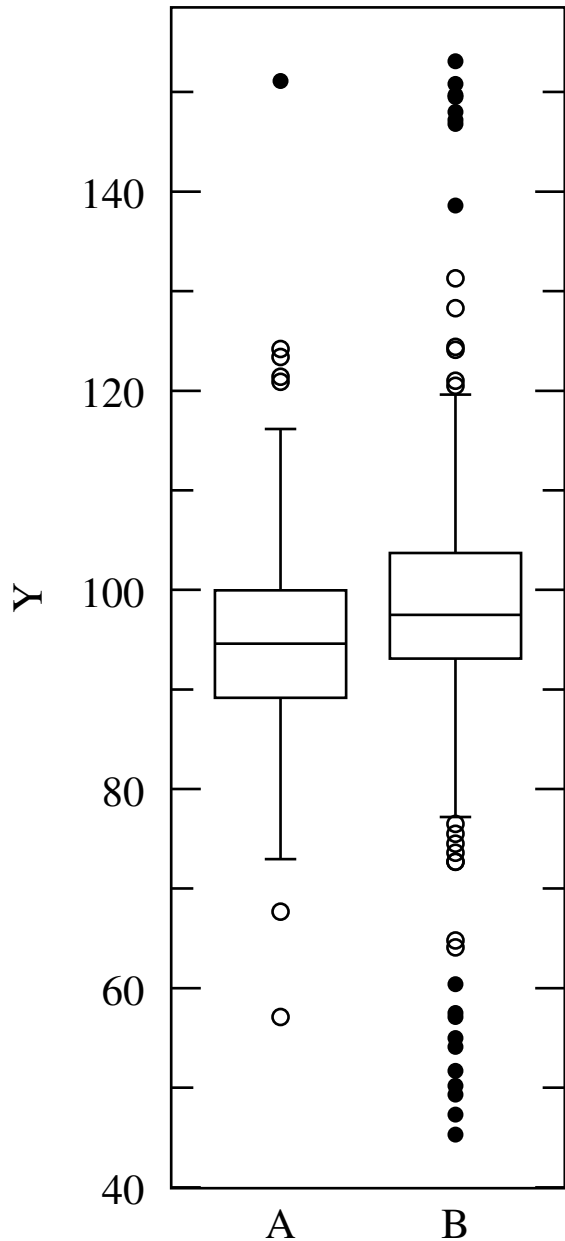
Hi = 126. Low = 62.9

Median = 106.

Average Absolute Deviation from Median = 10.4

# Heights (mm) Value Village vs. All Others

Figure 6c



Value Village vs. Non-Dollarama

t=-0.656

sdev= 16.5

degrees of freedom =266 The probability of this result, assuming the null hypothesis, is 0.51

Group A: Number of items= 61

Mean = 96.0

95% confidence interval for Mean: 91.89 thru 100.2

Standard Deviation = 13.6

Hi = 151. Low = 57.1

Median = 94.6

Average Absolute Deviation from Median = 8.78

Group B: Number of items= 207

Mean = 97.6

95% confidence interval for Mean: 95.36 thru 99.87

Standard Deviation = 17.2

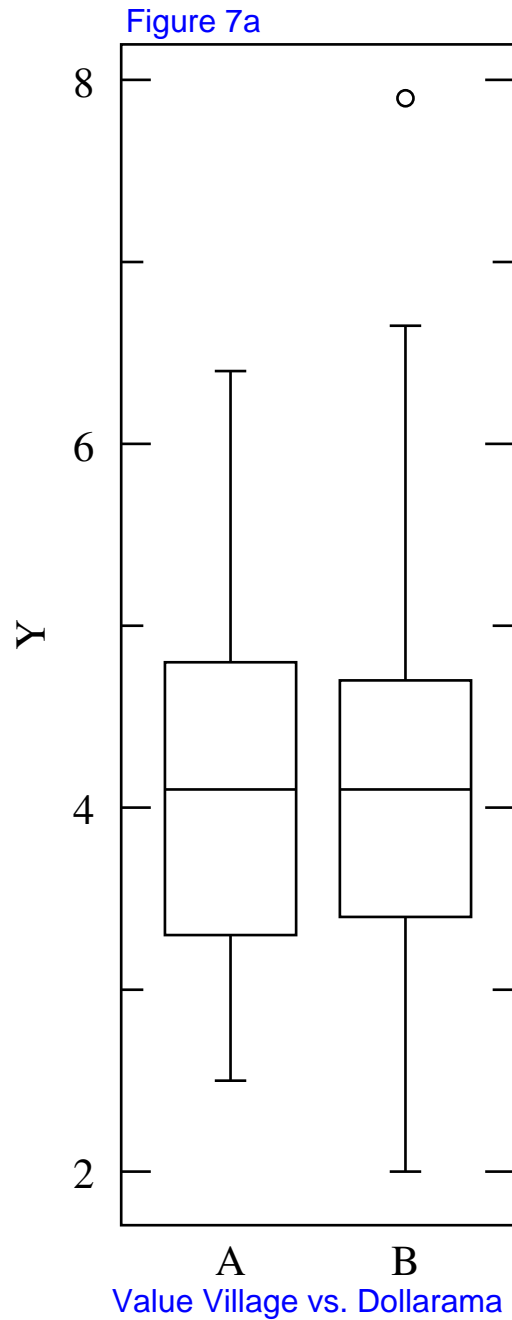
Hi = 153. Low = 45.3

Median = 97.5

Average Absolute Deviation from Median = 10.7

Data Reference: 3949

Rim Thickness (mm) Value Village vs. Dollarama



$t=-0.129$

sdev= 1.06

degrees of freedom = 80 The probability of this result, assuming the null hypothesis, is 0.90

Group A: Number of items= 61

Mean = 4.17

95% confidence interval for Mean: 3.897 thru 4.435

Standard Deviation = 0.958

Hi = 6.40 Low = 2.50

Median = 4.10

Average Absolute Deviation from Median = 0.767

Group B: Number of items= 21

Mean = 4.20

95% confidence interval for Mean: 3.742 thru 4.658

Standard Deviation = 1.30

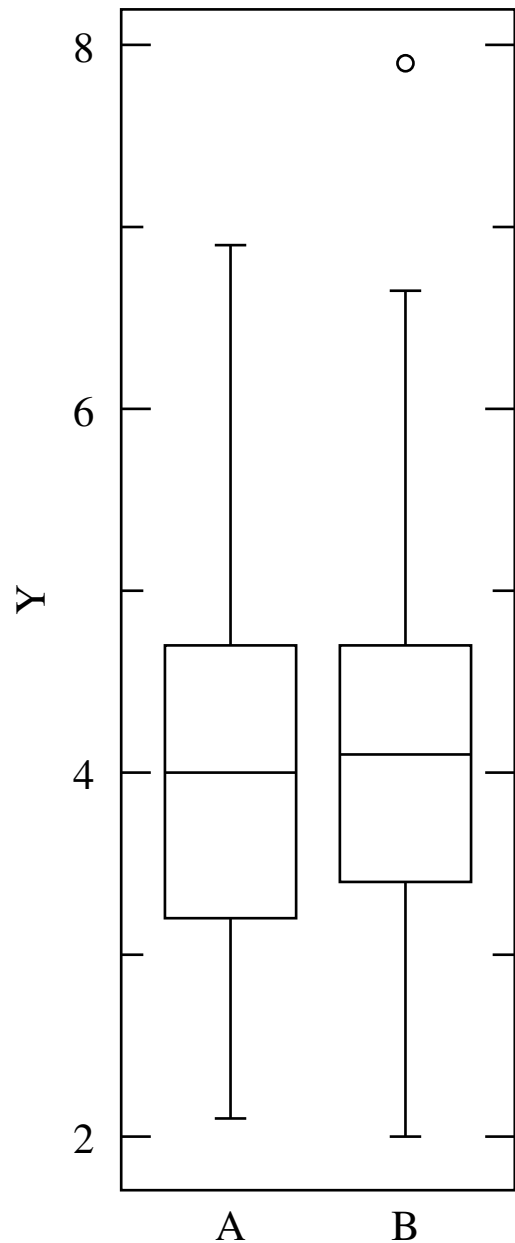
Hi = 7.90 Low = 2.00

Median = 4.10

Average Absolute Deviation from Median = 0.910

# Rim Thickness (mm) Non-Dollarama vs. Dollarama

Figure 7b



Non-Dollarama vs. Dollarama

$t = -0.392$

$sdev = 1.15$

degrees of freedom = 226 The probability of this result, assuming the null hypothesis, is 0.70

Group A: Number of items = 207

Mean = 4.10

95% confidence interval for Mean: 3.940 thru 4.254

Standard Deviation = 1.13

Hi = 6.90 Low = 2.10

Median = 4.00

Average Absolute Deviation from Median = 0.902

Group B: Number of items = 21

Mean = 4.20

95% confidence interval for Mean: 3.707 thru 4.693

Standard Deviation = 1.30

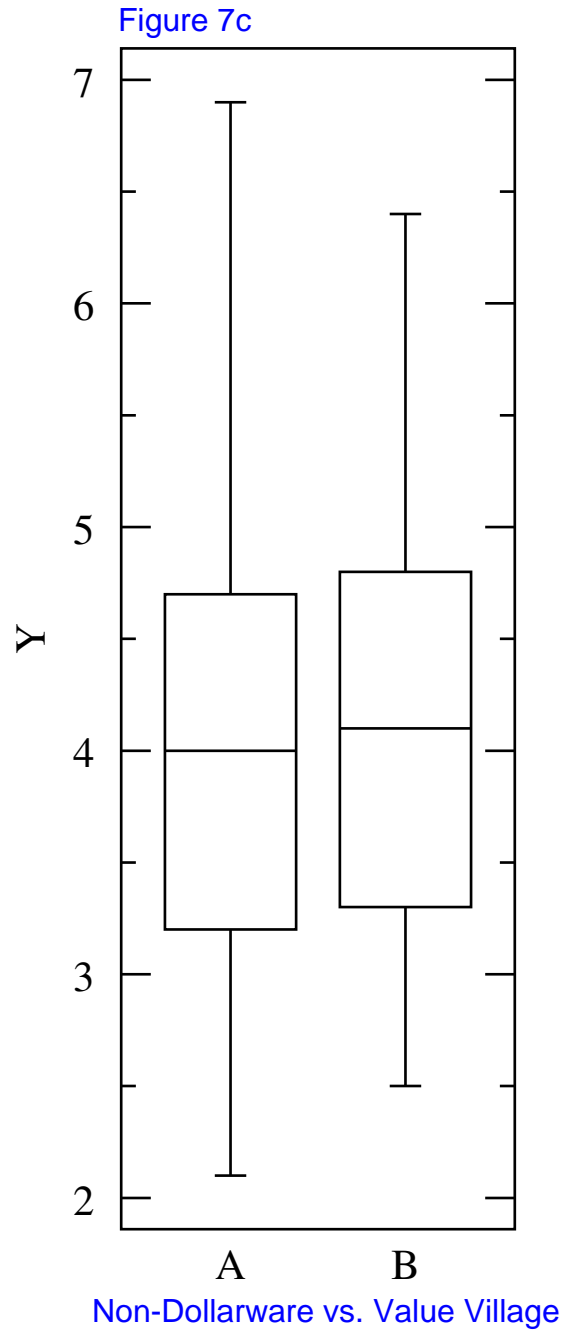
Hi = 7.90 Low = 2.00

Median = 4.10

Average Absolute Deviation from Median = 0.910

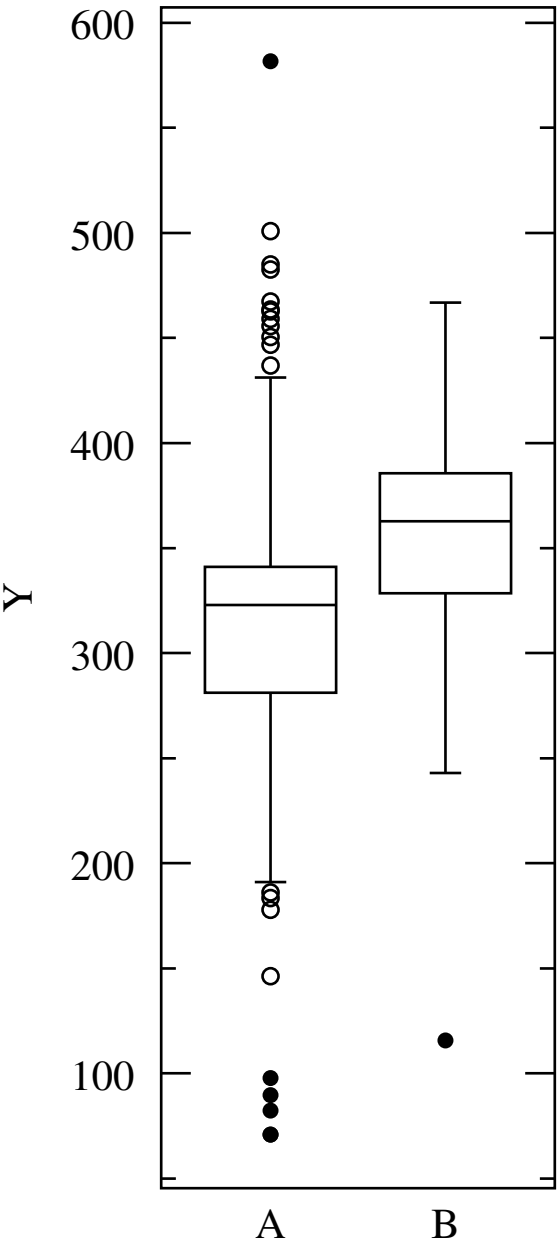
Data Reference: 77FF

Rim Thickness (mm) Non-Dollarware vs. Value Village



t=-0.429 sdev= 1.09 degrees of freedom =266 The probability of this result, assi

Figure 8a

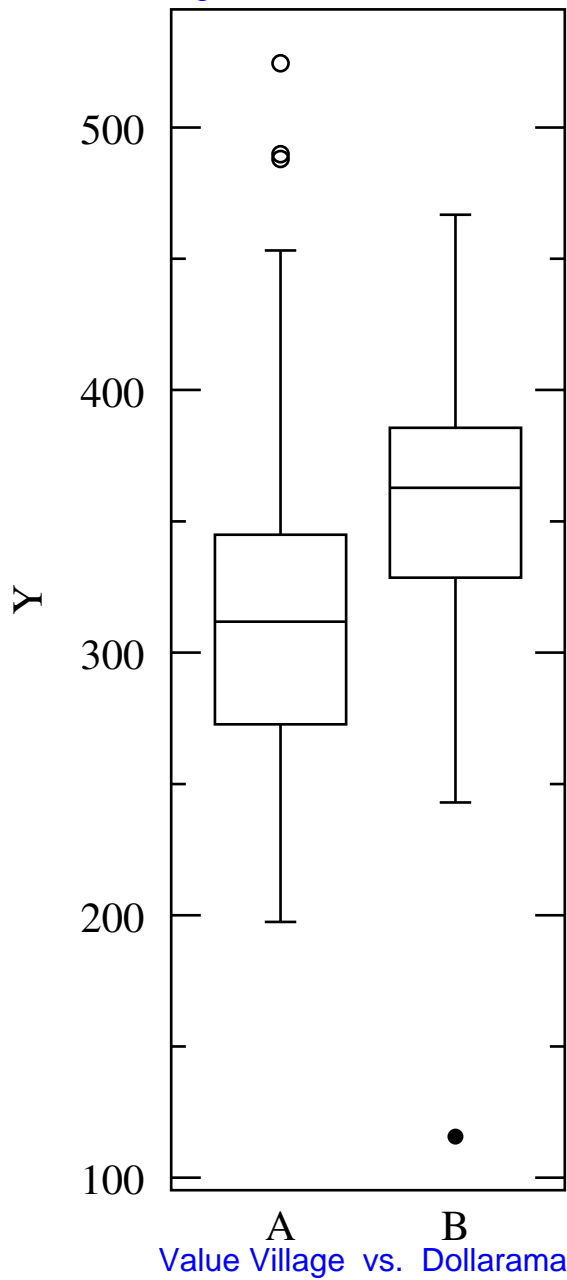


Non-Dollarama vs. Dollarama

-2.02sdev = 72.0degrees of freedom = 226 The probability of this result, assuming the null hypotheses

Volumes (mL) Value Village vs. Dollarama

Figure 8b



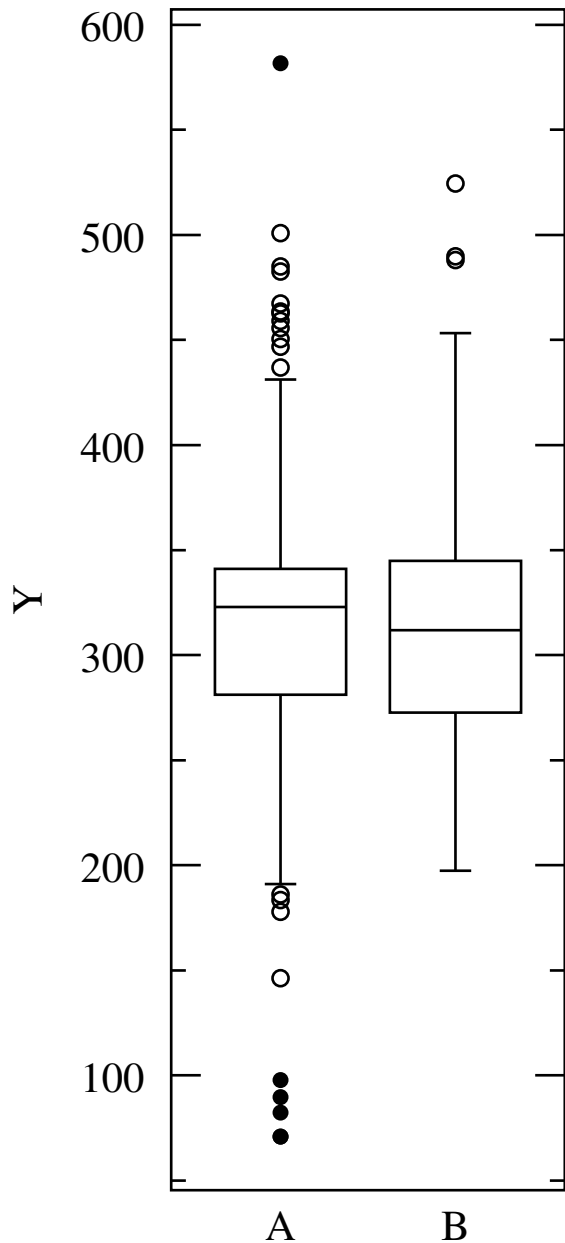
t= -1.99  
sdev= 66.4  
degrees of freedom = 80  
The probability of this result, assuming the null hypothesis, is 0.050

Group A: Number of items= 61  
Mean = 315.  
95% confidence interval for Mean: 297.6 thru 331.5  
Standard Deviation = 64.6  
Hi = 524. Low = 197.  
Median = 312.  
Average Absolute Deviation from Median = 45.8

Group B: Number of items= 21  
Mean = 348.  
95% confidence interval for Mean: 319.1 thru 376.8  
Standard Deviation = 71.6  
Hi = 467. Low = 116.  
Median = 363.  
Average Absolute Deviation from Median = 47.3

Volumes (mL) Non-Dollarama vs. Value Village

Figure 8c



Non-Dollarama vs. Value Village

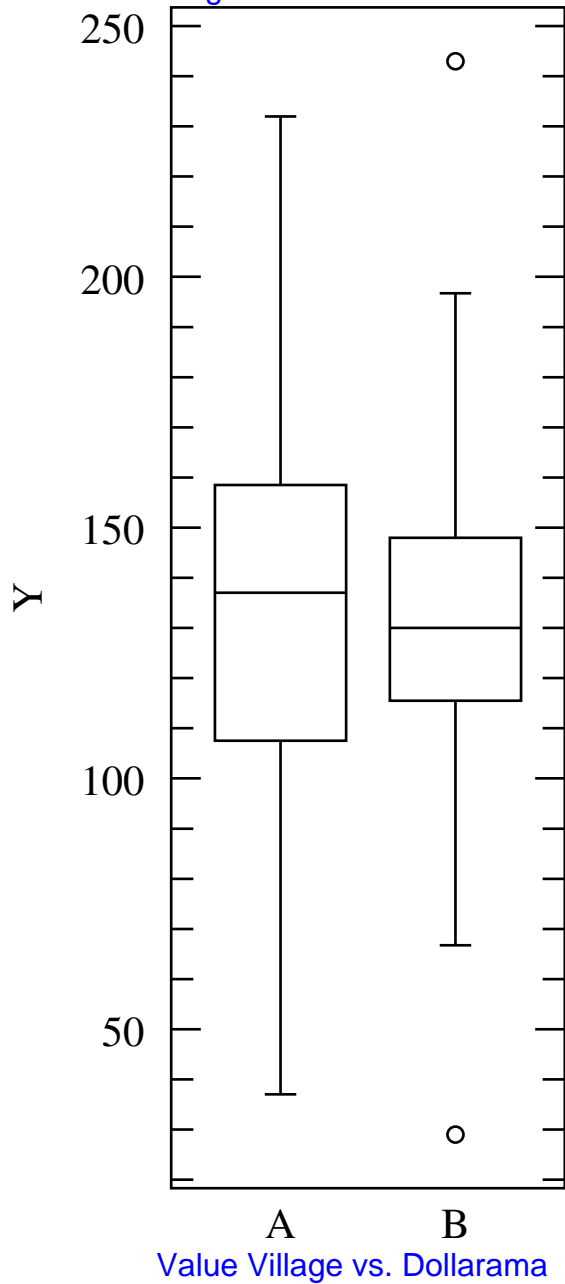
t= 0.877E-02  
sdev= 70.4  
degrees of freedom =266  
The probability of this result, assuming the null hypothesis, is 0.99

Group A: Number of items= 207  
Mean = 315.  
95% confidence interval for Mean: 305.0 thru 324.3  
Standard Deviation = 72.0  
Hi = 582. Low = 70.9  
Median = 323.  
Average Absolute Deviation from Median = 48.1

Group B: Number of items= 61  
Mean = 315.  
95% confidence interval for Mean: 296.8 thru 332.3  
Standard Deviation = 64.6  
Hi = 524. Low = 197.  
Median = 312.  
Average Absolute Deviation from Median = 45.8

Displacement Volumes (mL) Value Village vs. Dollarama

Figure 9a



t= 0.600E-01

sdev= 41.8

degrees of freedom = 80 The probability of this result, assuming the null hypothesis, is 0.95

Group A: Number of items= 61

Mean = 132.

95% confidence interval for Mean: 121.3 thru 142.6

Standard Deviation = 42.8

Hi = 232. Low = 37.0

Median = 137.

Average Absolute Deviation from Median = 32.9

Group B: Number of items= 21

Mean = 131.

95% confidence interval for Mean: 113.2 thru 149.5

Standard Deviation = 38.5

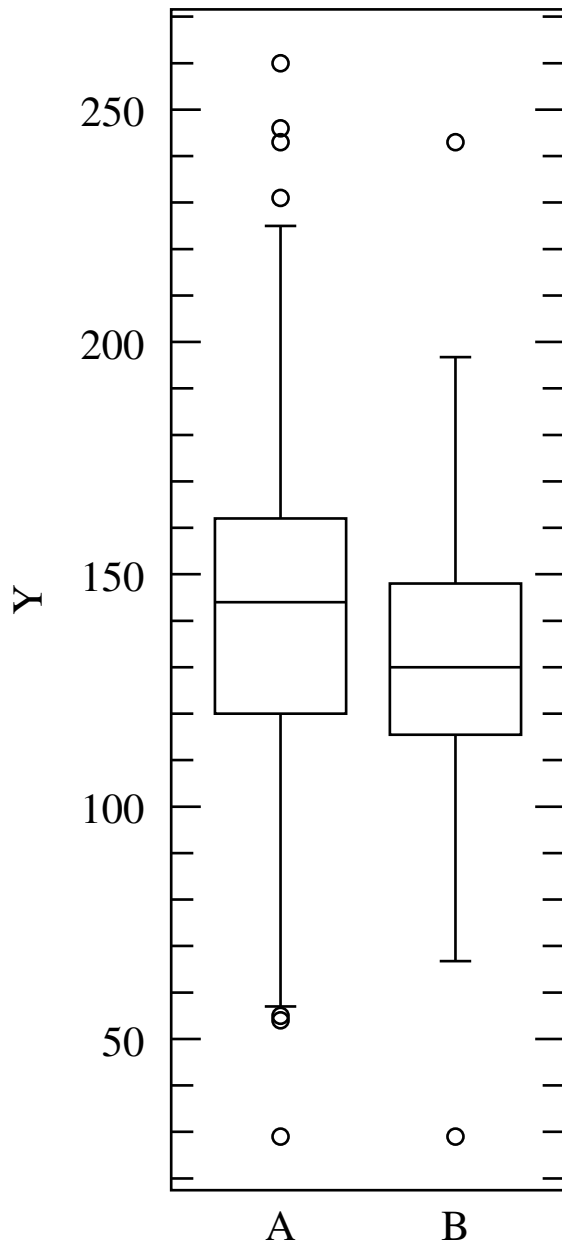
Hi = 243. Low = 29.0

Median = 130.

Average Absolute Deviation from Median = 24.1

# Displacement Volumes (mL) Non-Dollarama Vs. Dollarama

Figure 9b



Non-Dollarama Vs. Dollarama

$t = 1.46$

$sdev = 33.0$

degrees of freedom = 226 The probability of this result, assuming the null hypothesis, is 0.15

Group A: Number of items = 207

Mean = 142.

95% confidence interval for Mean: 137.8 thru 146.9

Standard Deviation = 32.4

Hi = 260. Low = 29.0

Median = 144.

Average Absolute Deviation from Median = 24.4

Group B: Number of items = 21

Mean = 131.

95% confidence interval for Mean: 117.1 thru 145.5

Standard Deviation = 38.5

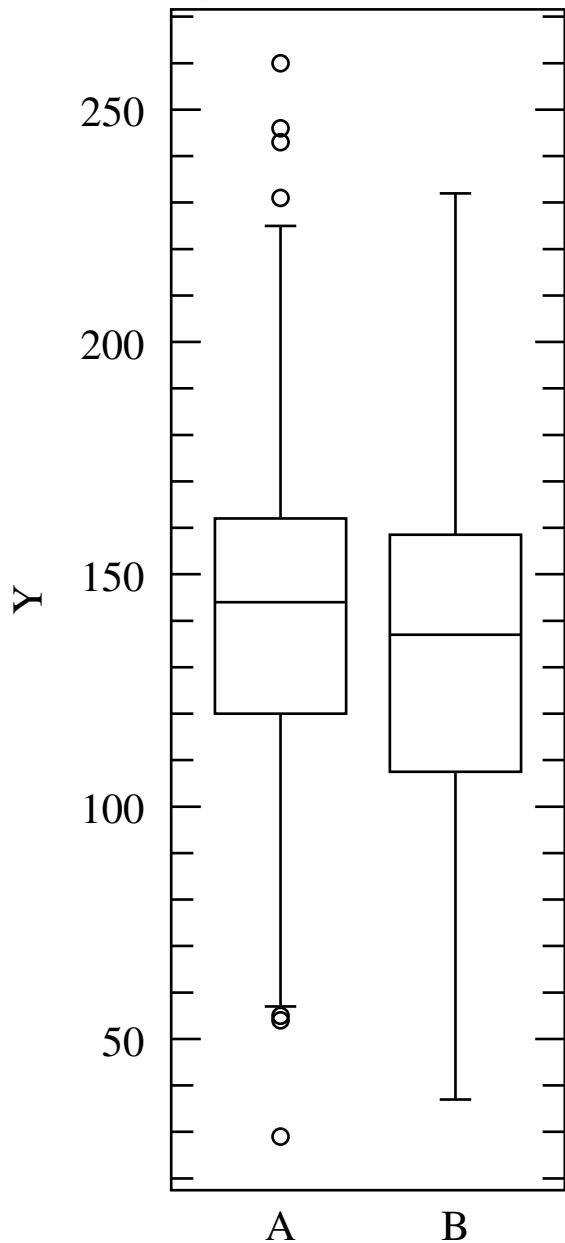
Hi = 243. Low = 29.0

Median = 130.

Average Absolute Deviation from Median = 24.1

# Displacement Volumes (mL) Non-Dollarama vs. Value Village

Figure 9c



Non-Dollarama vs. Value Village

$t = 2.03$

$sdev = 35.1$

degrees of freedom = 266 The probability of this result, assuming the null hypothesis, is 0.043

Group A: Number of items = 207

Mean = 142.

95% confidence interval for Mean: 137.5 thru 147.1

Standard Deviation = 32.4

Hi = 260. Low = 29.0

Median = 144.

Average Absolute Deviation from Median = 24.4

Group B: Number of items = 61

Mean = 132.

95% confidence interval for Mean: 123.1 thru 140.8

Standard Deviation = 42.8

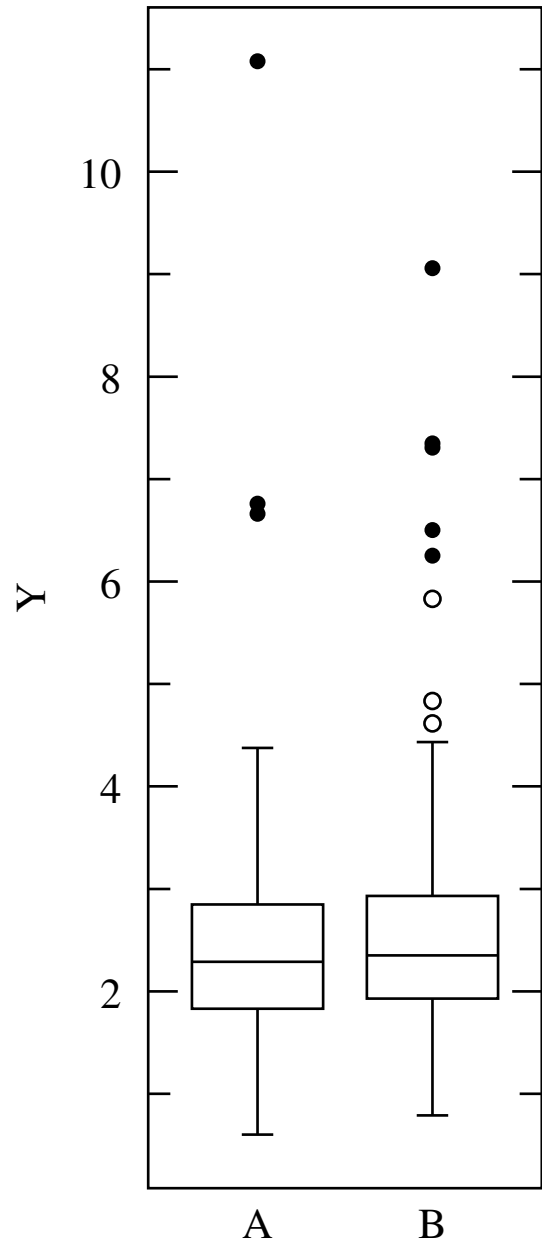
Hi = 232. Low = 37.0

Median = 137.

Average Absolute Deviation from Median = 32.9

Density (g/mL) Non-Dollarama vs Value Village

Figure 10a



Non-Dollarama vs Value Village

$t = -2.36$

$sdev = 1.20$

degrees of freedom = 266 The probability of this result, assuming the null hypothesis, is 0.019

Group A: Number of items = 207

Mean = 2.39

95% confidence interval for Mean: 2.223 thru 2.551

Standard Deviation = 1.03

Hi = 11.1 Low = 0.602

Median = 2.29

Average Absolute Deviation from Median = 0.649

Group B: Number of items = 61

Mean = 2.80

95% confidence interval for Mean: 2.496 thru 3.099

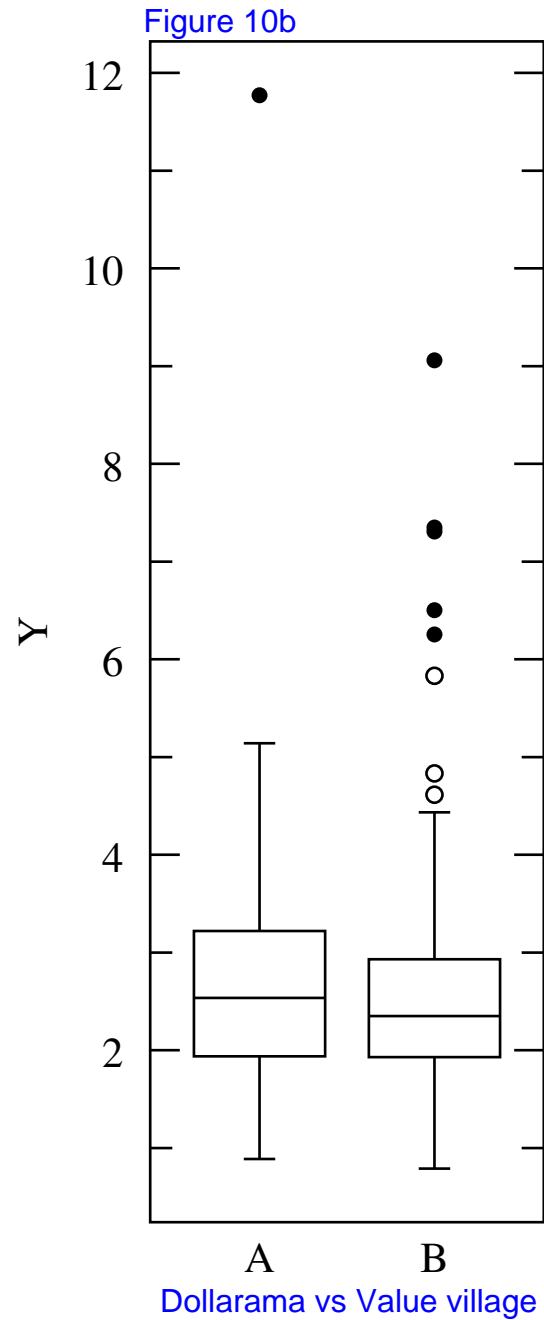
Standard Deviation = 1.63

Hi = 9.06 Low = 0.790

Median = 2.35

Average Absolute Deviation from Median = 0.973

## Density (g/mL) Dollarama vs Value Village



t= 0.220

sdev= 1.78

degrees of freedom = 80 The probability of this result, assuming the null hypothesis, is 0.83

Group A: Number of items= 21

Mean = 2.90

95% confidence interval for Mean: 2.123 thru 3.671

Standard Deviation = 2.17

Hi = 11.8 Low = 0.888

Median = 2.54

Average Absolute Deviation from Median = 0.994

Group B: Number of items= 61

Mean = 2.80

95% confidence interval for Mean: 2.344 thru 3.252

Standard Deviation = 1.63

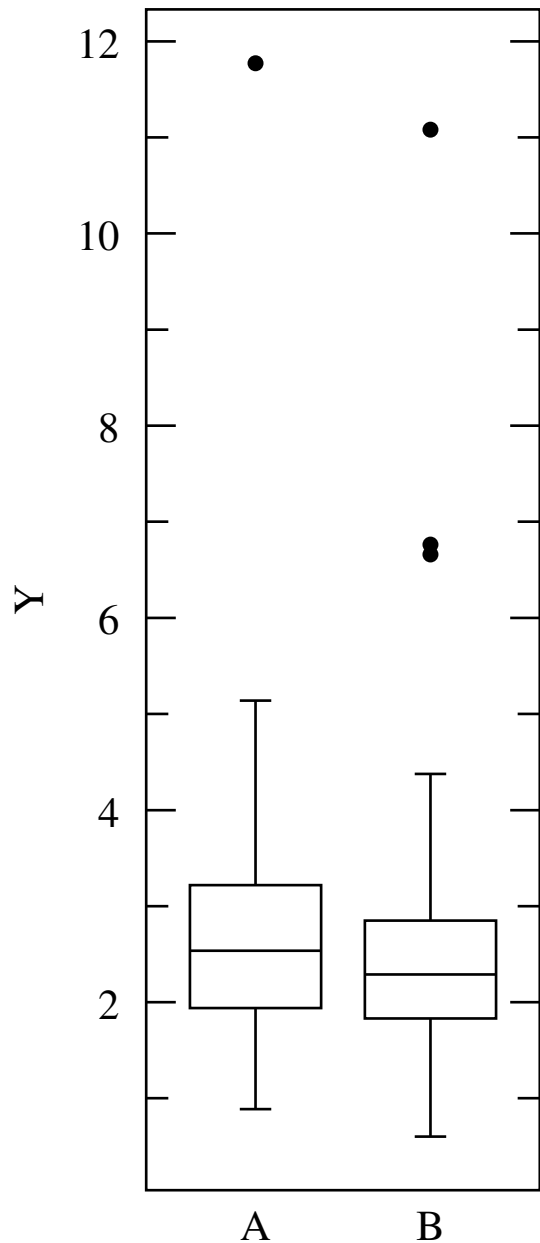
Hi = 9.06 Low = 0.790

Median = 2.35

Average Absolute Deviation from Median = 0.973

Density (g/mL) Dollarama vs. Non-Dollarama

Figure 10c



Dollarama vs. Non-Dollarama

$t = 1.89$

$sdev = 1.18$

degrees of freedom = 226 The probability of this result, assuming the null hypothesis, is 0.060

Group A: Number of items = 21

Mean = 2.90

95% confidence interval for Mean: 2.390 thru 3.404

Standard Deviation = 2.17

Hi = 11.8 Low = 0.888

Median = 2.54

Average Absolute Deviation from Median = 0.994

Group B: Number of items = 207

Mean = 2.39

95% confidence interval for Mean: 2.225 thru 2.548

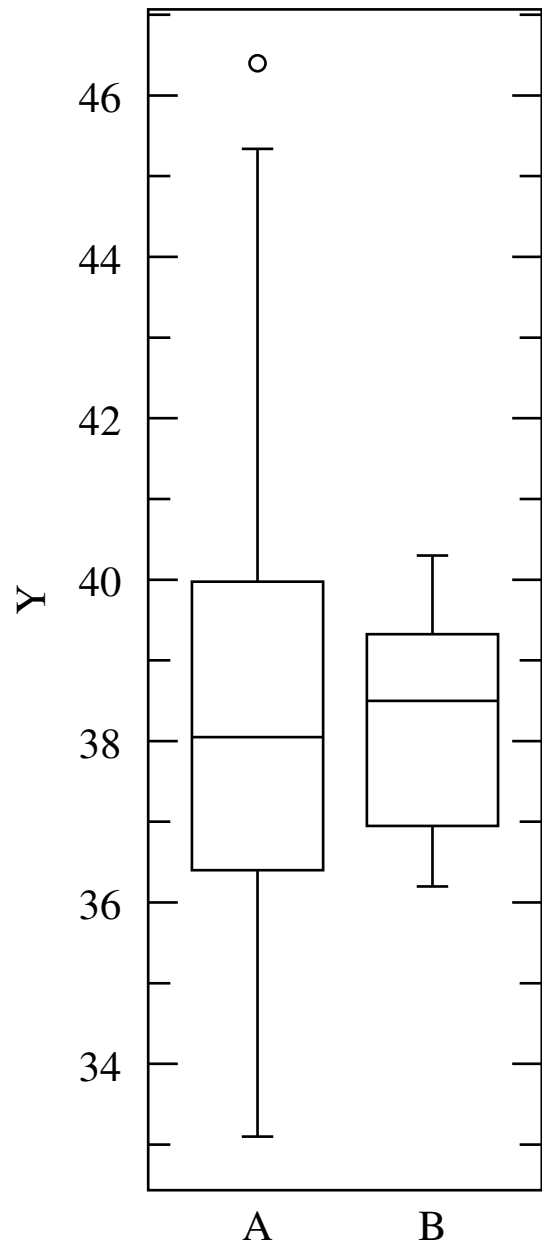
Standard Deviation = 1.03

Hi = 11.1 Low = 0.602

Median = 2.29

Average Absolute Deviation from Median = 0.649

Figure 11a



Value Village vs. Dollarama

t= 0.132

sdev= 2.94

degrees of freedom = 22 The probability of this result, assuming the null hypothesis, is 0.90

Group A: Number of items= 18

Mean = 38.5

95% confidence interval for Mean: 37.03 thru 39.91

Standard Deviation = 3.26

Hi = 46.4 Low = 33.1

Median = 38.0

Average Absolute Deviation from Median = 2.34

Group B: Number of items= 6

Mean = 38.3

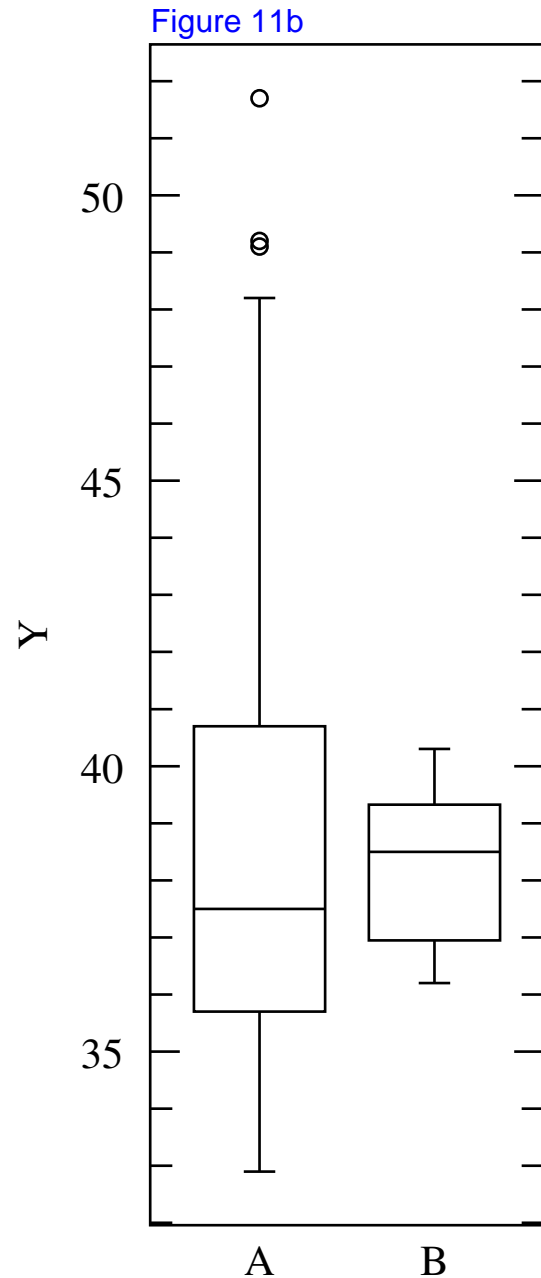
95% confidence interval for Mean: 35.79 thru 40.78

Standard Deviation = 1.43

Hi = 40.3 Low = 36.2

Median = 38.5

Average Absolute Deviation from Median = 1.05



Non-Dollarama vs. Dollarama

$t = 0.617E-01$

sdev = 3.64

degrees of freedom = 67 The probability of this result, assuming the null hypothesis, is 0.95

Group A: Number of items = 63

Mean = 38.4

95% confidence interval for Mean: 37.46 thru 39.30

Standard Deviation = 3.77

Hi = 51.7 Low = 32.9

Median = 37.5

Average Absolute Deviation from Median = 2.78

Group B: Number of items = 6

Mean = 38.3

95% confidence interval for Mean: 35.31 thru 41.25

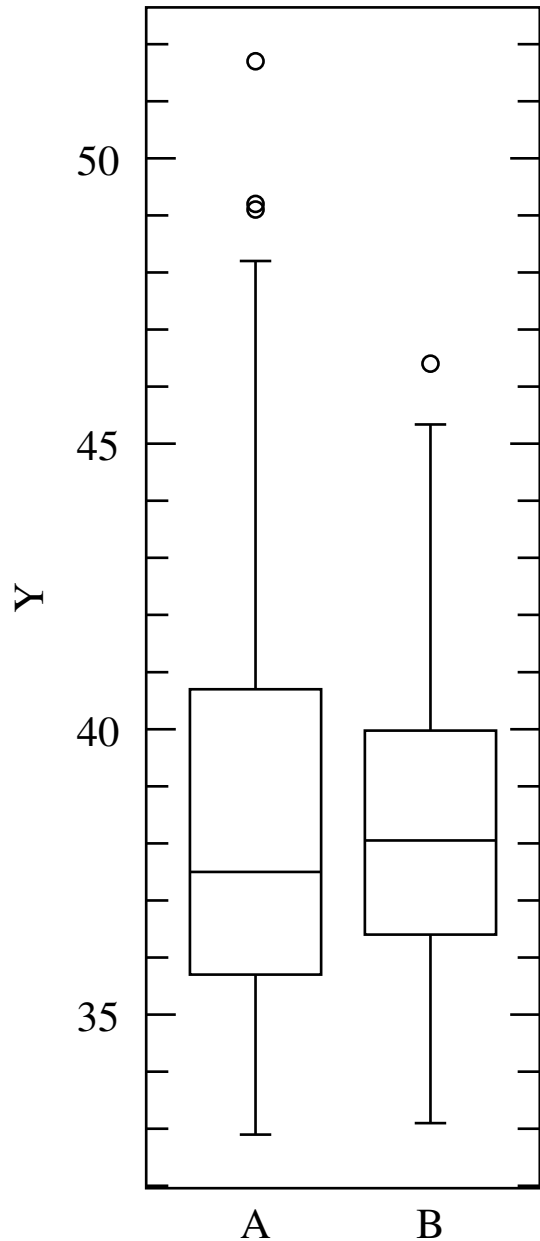
Standard Deviation = 1.43

Hi = 40.3 Low = 36.2

Median = 38.5

Average Absolute Deviation from Median = 1.05

Figure 11c



Non-Dollarama vs. Value Village

t=-0.892E-01

sdev= 3.66

degrees of freedom = 79 The probability of this result, assuming the null hypothesis, is 0.93

Group A: Number of items= 63

Mean = 38.4

95% confidence interval for Mean: 37.46 thru 39.30

Standard Deviation = 3.77

Hi = 51.7 Low = 32.9

Median = 37.5

Average Absolute Deviation from Median = 2.78

Group B: Number of items= 18

Mean = 38.5

95% confidence interval for Mean: 36.75 thru 40.18

Standard Deviation = 3.26

Hi = 46.4 Low = 33.1

Median = 38.0

Average Absolute Deviation from Median = 2.34