

Five Number Summary for Height:

59 59 60 60 61 || 62 62 63 63 64 || 65 66 67 67 67 67 67 67 69 72

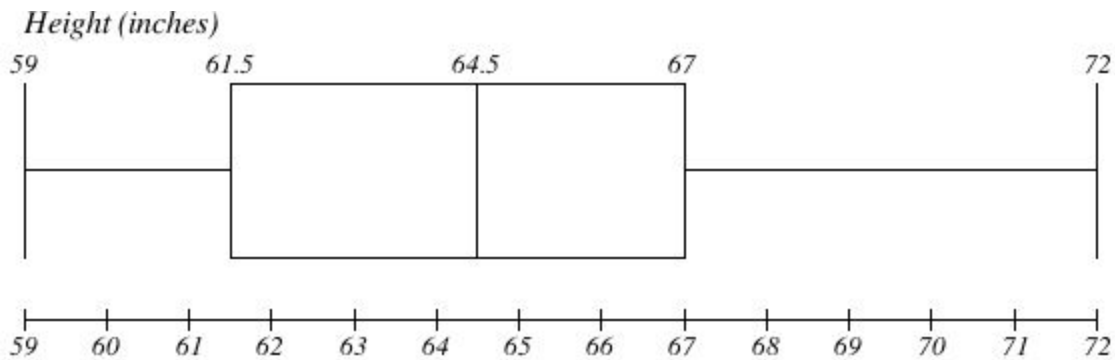
Min: 59

Q1: 61.5

Median: 64.5

Q3: 67

Max: 72



From the IQR above, we can see that 50% of students in the sample are between 61.5 and 67 inches tall.

Mean:

$$\mu = \frac{59+59+60+60+61+62+62+63+63+64+65+66+67+67+67+67+67+67+69+72}{20}$$

$$\mu = \frac{1287}{20} = 64.35$$

So the average height in my sample is 64.35 inches. This is almost identical to the median height of 64.35 inches as found above.

Standard Deviation:

$$\mu = 64.35$$

$$(64.35 - 59)^2 = 28.6225$$

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$$(64.35 - 60)^2 = 18.9225$$

$$\text{new } \mu = 12.3275$$

$$(64.35 - 60)^2 = 18.9225$$

$$(64.35 - 61)^2 = 11.2225$$

$$(64.35 - 62)^2 = 5.5225$$

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$$(64.35 - 63)^2 = 1.8225$$

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$$(64.35 - 64)^2 = 0.1225$$

$$(64.35 - 65)^2 = 0.4225$$

$$(64.35 - 66)^2 = 2.7225$$

$$(64.35 - 67)^2 = 7.0225$$

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$$(64.35 - 69)^2 = 21.6225$$

$$(64.35 - 72)^2 = 58.5225$$

$$\sigma = \sqrt{12.3275} = 3.511054$$