Standard Deviation Solution:

/* Standard Deviation, a couple of definitions:

In statistics, the standard deviation is a measure of the amount of variation or dispersion
of a set of values. A low standard deviation indicates that the values tend to be close to
the mean of the set, while a high standard deviation indicates that the values are spread
out over a wider range. -- Wikipedia

The Standard Deviation is a measure of how spread out numbers are. -- Math is Fun
*/

public class standardDeviation
{
    public static void main(String[] args)
    {
        // Calculate the mean for the following array:
        int[] values = {600, 470, 170, 430, 300}; // sample set: heights of five canines
        int total = 0;
        for (int i = 0; i < values.length; i++)
            total = total + values[i];

        double mean = ((double)total) / values.length;

        // Next calculate the variance:
        double vTotal = 0;
        for (int i = 0; i < values.length; i++)
        {
            double differenceSquared = (double) ((values[i] - mean) * (values[i] - mean));
            vTotal = vTotal + differenceSquared; // vTotal += differenceSquared;
        }
        double variance = vTotal/values.length;
        double stdev = Math.sqrt(variance);
        System.out.println("The mean: " + mean + 
             "Variance: " + variance + 
             "Standard Deviation: " + stdev);
    }
}

Standard Deviation sample run:

$ java standardDeviation
The mean: 394.0
Variance: 21704.0
Standard Deviation: 147.32277488562318