

PROBLEM SET 12-4
(Standard Deviation)

Find the range and interquartile range of each set of values.

1. {5, 6, 7, 3, 4, 5, 6, 7, 8}
2. {56, 78, 125, 34, 67, 91, 20}
3. {724, 786, 670, 760, 300, 187, 190, 345, 456, 732, 891, 879, 324}

Find the mean and the standard deviation for each set of values.

4. {78, 90, 456, 673, 111, 381, 21}
5. {13, 15, 17, 18, 12, 21, 10}

A data set has mean 25 and standard deviation 5. Find the z -score of each value.

6. 39
7. 18
8. 25
9. 11

10. **Find the standard deviation for each data set and use it to compare the two data sets.**

The fastest recorded speeds of various large wild cats (mph) are:
70, 50, 30, 40, 35, 30, 30, 40, 15

The fastest recorded speeds of various birds on flight (mph) are:
217, 106, 95, 56, 65, 37, 50, 31, 53, 25, 25, 25