

Lesson 13: Standard Deviation in Real-World Contexts

- Let's think about standard deviation in the real world.

13.1: Estimation: Marathon Runner



How long will it take the runner to finish the marathon?

1. Record an estimate that is:

too low	about right	too high

2. Explain your reasoning.

13.2: Calculate Standard Deviation



Movie A ratings on a 10 point scale:

9, 8, 10, 10, 7, 1, 8, 1, 2, 8

Movie B ratings on a 10 point scale:

9, 8, 8, 7, 9, 7, 7, 9, 7, 8

Restaurant A ratings on a 100 point scale:

88, 87, 89, 90, 87, 85, 88, 91, 86, 86, 88, 89

Restaurant B ratings on a 100 point scale:

90, 65, 89, 50, 94, 93, 95, 95, 75, 70, 88, 89

1. Calculate the mean and standard deviation for each data set.

2. Based on these statistics, which movie and restaurant would you choose? Explain your reasoning.

