

Do Now

Compare the grades from the last marking period of 2 students Lisa and Melissa.

Lisa: 50, 98, 100, 94, 78

Melissa: 85, 84, 83, 86, 82

a) What is the average of each student's scores?

$$\begin{aligned} \text{Lisa: } \frac{420}{5} &= \boxed{84} \\ \bar{x} &= \frac{\sum x}{n} = \frac{420}{5} \end{aligned} \quad \left\{ \begin{aligned} \text{Melissa: } \frac{420}{5} &= \boxed{84} \\ \bar{x} &= \frac{\sum x}{n} = \frac{420}{5} \end{aligned} \right.$$

b) What can you tell about the type of marking period each student had?

Lisa & Melissa had the same average but Lisa's grades are more spread out (larger MAD) Melissa's grades were more consistent & closer together (smaller MAD)

Lisa		Melissa
Mean: 84	}	Mean: 84
MAD: $\frac{34 + 14 + 16 + 10 + 6}{5}$	}	MAD: $\frac{1 + 0 + 1 + 2 + 2}{5}$
= $\frac{80}{5}$		= $\frac{6}{5}$
= $\boxed{16}$ → Bigger MAD more spread out		= $\boxed{1.2}$ → Smaller MAD closer together