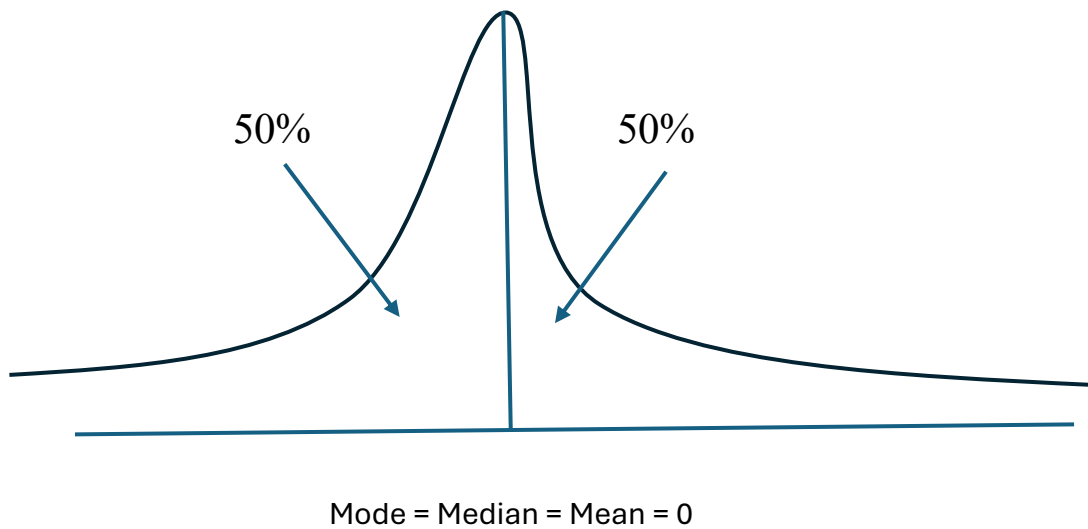


Chapter 5 Z score and distribution

1) What is the Z distribution



2) Individual Z score and distribution

$$Z_i = \frac{X_i - \bar{X}}{S}$$

$$Z_{Amy} = \frac{91 - 88}{11} = .27$$

Amy's percentile is 60.64%, meaning that she is higher than 60.64% of her classmates in test1.

$$Z_{John} = \frac{82 - 88}{11} = -.54$$

John's percentile is 29.46%, meaning that his test 1 score is higher than 29.46% of his classmates.