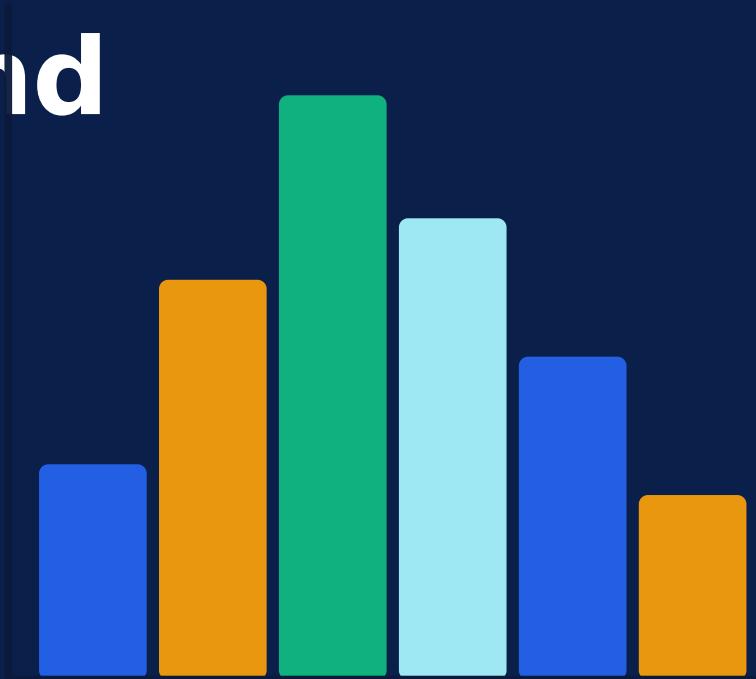


Statistics and probability

**Interquartile range****B**

$$IQR = Q_3 - Q_1$$

Mean ($n = \sum f_i$)**B**

$$\bar{x} = \frac{\sum f_i x_i}{n}$$

Outliers

$$\backslash (x \text{ or } x > Q_3 + 1.5 IQR$$

Standard deviation

$$\sigma = \sqrt{\frac{\sum f(x - \bar{x})^2}{n}}$$

Data $\times a$ then $+b$

$$\text{mean} \rightarrow a\bar{x} + b, \quad \text{s.d.} \rightarrow |a|\sigma$$

Probability**B**

$$P(A) = \frac{n(A)}{n(U)}, \quad P(A) + P(A') = 1$$

Expected number of occurrences

$$n \times P(A)$$

Combined events**B**

$$P(A \cup B) = P(A) + P(B) - P(A \cap B)$$

B given in the exam. Learn the rest.