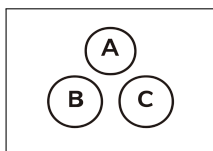


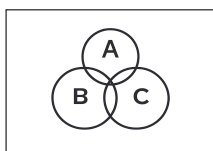
12 Discrete Distribution Odds and Probability

D



$$S = \{1, 2, 3, 4\}$$

$$T = \{1\}$$

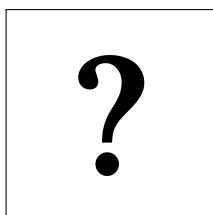


$$P(T) = \frac{|T|}{|S|} = \frac{1}{4} = 0.25$$

$$P(T^C) = 1 - P(T) = 0.75$$

$$\frac{|T|}{|T^C|} = \frac{|E|}{|S|} \times \frac{|S|}{|E^C|} = \frac{P(E)}{P(E^C)} = \frac{P(E)}{1 - P(E)}$$

$$a : b \rightarrow \frac{a}{a+b} = \frac{ak}{ak+bk} = \frac{|E|}{|E|+|E^C|} = \frac{|E|}{|S|} = P(E)$$



$$P(S) = 0.60 = \frac{3}{5}$$

$$P(S^C) = 1 - \frac{3}{5} = \frac{2}{5}$$

$$a : b(S^C) = ?$$

12 Discrete Distribution Odds and Probability

D



$$P(S) = 0.60 = \frac{3}{5}$$

$$P(S^C) = 1 - \frac{3}{5} = \frac{2}{5}$$

$$a : b(S^C) = \frac{P(S^C)}{P(S)} = \frac{2/5}{3/5} = \frac{2}{3}$$