

An experiment consists of flipping a dime, a nickel, and a penny one time each.

(a) Give the sample space S for the experiment.

(b) Let A be the event that the dime comes up heads. Let B be the event that both the nickel and the penny come up tails. Find $P(A)$ and $P(B)$.

(c) Find $P(A \text{ and } B)$. Are A and B independent? Are they disjoint?

(d) Find $P(A \text{ or } B)$.