Suppose a bucket contains three apples, one banana, two pears and three grapes, and you pick one unknown piece of fruit equally likely from the bucket at random. Denote the sample space by $S = \{\text{apple}, \text{banana}, \text{pear}, \text{grape}\}$. Which of the following events has twice the probability of occuring as the event that we pick an apple?

(a) $\{\text{apple}, \text{banana}, \text{pear}\}$

(b) $\{\text{banana}\}$

(c) $\{\text{grape}\}$

(d) $\{\text{banana}, \text{grape}\}$

(e) $\{\text{apple}, \text{banana}, \text{grape}\}$

(f) $\{\text{pear}, \text{grape}\}$

(g) $\{\text{pear}\}$

(h) $\{\text{apple}, \text{banana}\}$

(i) $\{\text{apple}, \text{pear}\}$

(j) S

(k) None of these