Let $S = \{1, 2, 3, \ldots, 100\}$ be a sample space with equally likely outcomes. If we conduct an experiment with this sample space, what is the probability the outcome is a multiple of both 6 and 10?

(a) 3/100

(b) 1/100

(c) 1/50

(d) 1/25

(e) 1/20

(f) 3/50

(g) 1/2

(h) 1/10

(i) 1/6

(j) 1/3

(k) 1/60

(l) 1/16

(m) 0

(n) 1

(o) None of these