

283. For a four-state model with states numbered 0, 1, 2, and 3, you are given:

(i) The only possible transitions are 0 to 1, 0 to 2, and 0 to 3.

(ii) $\mu_{x+t}^{01} = 0.3, t \geq 0$

(iii) $\mu_{x+t}^{02} = 0.5, t \geq 0$

(iv) $\mu_{x+t}^{03} = 0.7, t \geq 0$

Calculate p_x^{02}

(A) 0.26

(B) 0.30

(C) 0.33

(D) 0.36

(E) 0.39