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The event B_i that

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The event B_i that at least one person

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The event B_i that at least one person gets off at floor i .

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The event B_i that at least one person gets off at floor i . Using indicators I_{B_i}

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The event B_i that at least one person gets off at floor i . Using indicators I_{B_i} we introduce the random variable

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The event B_i that at least one person gets off at floor i . Using indicators I_{B_i} we introduce the random variable N

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The event B_i that at least one person gets off at floor i . Using indicators I_{B_i} we introduce the random variable N as the number of stops. We have

$$N =$$

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The event B_i that at least one person gets off at floor i . Using indicators I_{B_i} we introduce the random variable N as the number of stops. We have

$$N = \sum I_{B_i}$$

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The event B_i that at least one person gets off at floor i . Using indicators I_{B_i} we introduce the random variable N as the number of stops. We have

$$N = I_{B_1} + \cdots +$$

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$$N = I_{B_1} + \cdots + I_{B_{10}}$$

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$$N = I_{B_1} + \cdots + I_{B_{10}} \quad E(N) =$$

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$$N = I_{B_1} + \cdots + I_{B_{10}} \quad E(N) = E(I_{B_1} + \cdots + I_{B_{10}})$$

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$$E(N) = E(I_{B_1} + \cdots + I_{B_{10}}) = E(I_{B_1}) + \cdots + E(I_{B_{10}}) = P(B_1) + \cdots + P(B_{10}) =$$

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We find $P(B_1) =$

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We find $P(B_1) = 1 -$

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We find $P(B_1) = 1 - P(B_1^c) =$

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We find $P(B_1) = 1 - P(B_1^c) = 1 - \left(\frac{9}{10}\right)^{12}$

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We find $P(B_1) = 1 - P(B_1^c) = 1 - \left(\frac{9}{10}\right)^{12}$ thus $E(N) =$

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We find $P(B_1) = 1 - P(B_1^c) = 1 - \left(\frac{9}{10}\right)^{12}$ thus $E(N) = 10$

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We find $P(B_1) = 1 - P(B_1^c) = 1 - \left(\frac{9}{10}\right)^{12}$ thus $E(N) = 10 \left(1 - \left(\frac{9}{10}\right)^{12}\right) =$

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We find $P(B_1) = 1 - P(B_1^c) = 1 - \left(\frac{9}{10}\right)^{12}$ thus $E(N) = 10 \left(1 - \left(\frac{9}{10}\right)^{12}\right) = 7.18$