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02405 Probability

2003-10-5

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First we restate D : number of balls drawn to get two of the same colour.

IMM - DTU

02405 Probability

2003-10-5

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First we restate D : number of balls drawn to get two of the same colour. We draw one ball which is either red or black.

IMM - DTU

02405 Probability

2003-10-5

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First we restate D : number of balls drawn to get two of the same colour. We draw one ball which is either red or black. Having drawn a ball of some colour the number of draws to get one of the same colour is

IMM - DTU

02405 Probability

2003-10-5

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First we restate D : number of balls drawn to get two of the same colour. We draw one ball which is either red or black. Having drawn a ball of some colour the number of draws to get one of the same colour is geometrically distributed with probability

IMM - DTU

02405 Probability

2003-10-5

BFN/bfn

First we restate D : number of balls drawn to get two of the same colour. We draw one ball which is either red or black. Having drawn a ball of some colour the number of draws to get one of the same colour is geometrically distributed with probability $\frac{1}{2}$.

IMM - DTU

02405 Probability

2003-10-5

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First we restate D : number of balls drawn to get two of the same colour. We draw one ball which is either red or black. Having drawn a ball of some colour the number of draws to get one of the same colour is geometrically distributed with probability $\frac{1}{2}$. Thus D

IMM - DTU

02405 Probability

2003-10-5

BFN/bfn

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IMM - DTU

02405 Probability

2003-10-5

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IMM - DTU

02405 Probability

2003-10-5

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Question a)

IMM - DTU

02405 Probability

2003-10-5

BFN/bfn

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Question a)

$$P(D = i) =$$

IMM - DTU

02405 Probability

2003-10-5

BFN/bfn

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Question a)

$$P(D = i) = p(1 - p)^{i-2}, \quad p = 2, 3, \dots$$

Question b)

IMM - DTU

02405 Probability

2003-10-5

BFN/bfn

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Question a)

$$P(D = i) = p(1 - p)^{i-2}, \quad p = 2, 3, \dots$$

Question b)

$$E(D) =$$

IMM - DTU

02405 Probability
2003-10-5
BFN/bfn

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Question a)

$$P(D = i) = p(1 - p)^{i-2}, \quad p = 2, 3, \dots$$

Question b)

$$E(D) = E(X + 1) =$$

IMM - DTU

02405 Probability

2003-10-5

BFN/bfn

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Question a)

$$P(D = i) = p(1 - p)^{i-2}, \quad p = 2, 3, \dots$$

Question b)

$$E(D) = E(X + 1) = E(X) + 1 =$$

IMM - DTU

02405 Probability

2003-10-5

BFN/bfn

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Question a)

$$P(D = i) = p(1 - p)^{i-2}, \quad p = 2, 3, \dots$$

Question b)

$$E(D) = E(X + 1) = E(X) + 1 = \frac{1}{p} + 1$$

IMM - DTU

02405 Probability

2003-10-5

BFN/bfn

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Question a)

$$P(D = i) = p(1 - p)^{i-2}, \quad p = 2, 3, \dots$$

Question b)

$$E(D) = E(X + 1) = E(X) + 1 = \frac{1}{p} + 1 = 3$$

IMM - DTU

02405 Probability
2003-10-5
BFN/bfn

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Question a)

$$P(D = i) = p(1 - p)^{i-2}, \quad p = 2, 3, \dots$$

Question b)

$$E(D) = E(X + 1) = E(X) + 1 = \frac{1}{p} + 1 = 3$$

from page 212

IMM - DTU

02405 Probability
2003-10-5
BFN/bfn

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Question a)

$$P(D = i) = p(1 - p)^{i-2}, \quad p = 2, 3, \dots$$

Question b)

$$E(D) = E(X + 1) = E(X) + 1 = \frac{1}{p} + 1 = 3$$

from page 212 or 476,482.

Question c)

IMM - DTU

02405 Probability

2003-10-5

BFN/bfn

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Question a)

$$P(D = i) = p(1 - p)^{i-2}, \quad p = 2, 3, \dots$$

Question b)

$$E(D) = E(X + 1) = E(X) + 1 = \frac{1}{p} + 1 = 3$$

from page 212 or 476,482.

Question c)

$$V(D)$$

IMM - DTU

02405 Probability
2003-10-5
BFN/bfn

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Question a)

$$P(D = i) = p(1 - p)^{i-2}, \quad p = 2, 3, \dots$$

Question b)

$$E(D) = E(X + 1) = E(X) + 1 = \frac{1}{p} + 1 = 3$$

from page 212 or 476,482.

Question c)

$$V(D) = V(X + 1)$$

IMM - DTU

02405 Probability
2003-10-5
BFN/bfn

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Question a)

$$P(D = i) = p(1 - p)^{i-2}, \quad p = 2, 3, \dots$$

Question b)

$$E(D) = E(X + 1) = E(X) + 1 = \frac{1}{p} + 1 = 3$$

from page 212 or 476,482.

Question c)

$$V(D) = V(X + 1) = V(X)$$

IMM - DTU

02405 Probability

2003-10-5

BFN/bfn

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Question a)

$$P(D = i) = p(1 - p)^{i-2}, \quad p = 2, 3, \dots$$

Question b)

$$E(D) = E(X + 1) = E(X) + 1 = \frac{1}{p} + 1 = 3$$

from page 212 or 476,482.

Question c)

$$V(D) = V(X + 1) = V(X) = \frac{1 - p}{p^2}$$

IMM - DTU

02405 Probability
2003-10-5
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Question a)

$$P(D = i) = p(1 - p)^{i-2}, \quad p = 2, 3, \dots$$

Question b)

$$E(D) = E(X + 1) = E(X) + 1 = \frac{1}{p} + 1 = 3$$

from page 212 or 476,482.

Question c)

$$V(D) = V(X + 1) = V(X) = \frac{1 - p}{p^2} = 2,$$

IMM - DTU

02405 Probability

2003-10-5

BFN/bfn

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Question a)

$$P(D = i) = p(1 - p)^{i-2}, \quad p = 2, 3, \dots$$

Question b)

$$E(D) = E(X + 1) = E(X) + 1 = \frac{1}{p} + 1 = 3$$

from page 212 or 476,482.

Question c)

$$V(D) = V(X + 1) = V(X) = \frac{1 - p}{p^2} = 2, \quad SD(D) = \sqrt{2}$$

IMM - DTU

02405 Probability
2003-10-5
BFN/bfn

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Question a)

$$P(D = i) = p(1 - p)^{i-2}, \quad p = 2, 3, \dots$$

Question b)

$$E(D) = E(X + 1) = E(X) + 1 = \frac{1}{p} + 1 = 3$$

from page 212 or 476,482.

Question c)

$$V(D) = V(X + 1) = V(X) = \frac{1 - p}{p^2} = 2, \quad SD(D) = \sqrt{2}$$

from page 213

IMM - DTU

02405 Probability
2003-10-5
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Question a)

$$P(D = i) = p(1 - p)^{i-2}, \quad p = 2, 3, \dots$$

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$$E(D) = E(X + 1) = E(X) + 1 = \frac{1}{p} + 1 = 3$$

from page 212 or 476,482.

Question c)

$$V(D) = V(X + 1) = V(X) = \frac{1 - p}{p^2} = 2, \quad SD(D) = \sqrt{2}$$

from page 213 or 476,482.