

2 An ordinary fair die is thrown until a 6 is obtained.

(a) Find the probability that obtaining a 6 takes more than 8 throws. [2]

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[illegible]

Two ordinary fair dice are thrown together until a pair of 6s is obtained. The number of throws taken is denoted by the random variable X .

(b) Find the expected value of X . [1]

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(c) Find the probability that obtaining a pair of 6s takes either 10 or 11 throws. [2]

[illegible]