Submitted By:

Tony Trotter

Text

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a.

b.

c.

Defining success to be an increase, so X has Bernoulli distribution with probability of success .

Y is distributed as binomial with an n value of 10, because that’s the number of Bernoulli trials there are and a P value of , since that’s the fixed probability of success across all those n equals 10 trials.

d.



|  |  |  |  |  |  |  |  |  |  |
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|  |  | a |  |  | μ |  |  | b |  |



By definition we have:

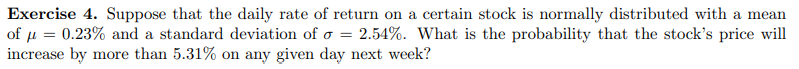
From problem #2, we found that , for the discrete uniform distribution, is equal to and for . So we have:

Since each of these sums goes from , we can find a formula for them as follows:

Using these, we get:

\* [- (a+b) + (b-a+1)]

as intended.



Text

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a.

b.





Text

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2. Exponential;

Text

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1. i. Sum of normal is normal distribution

ii.

So,

Word

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1. ;

Application

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1. .00075
2. 0

