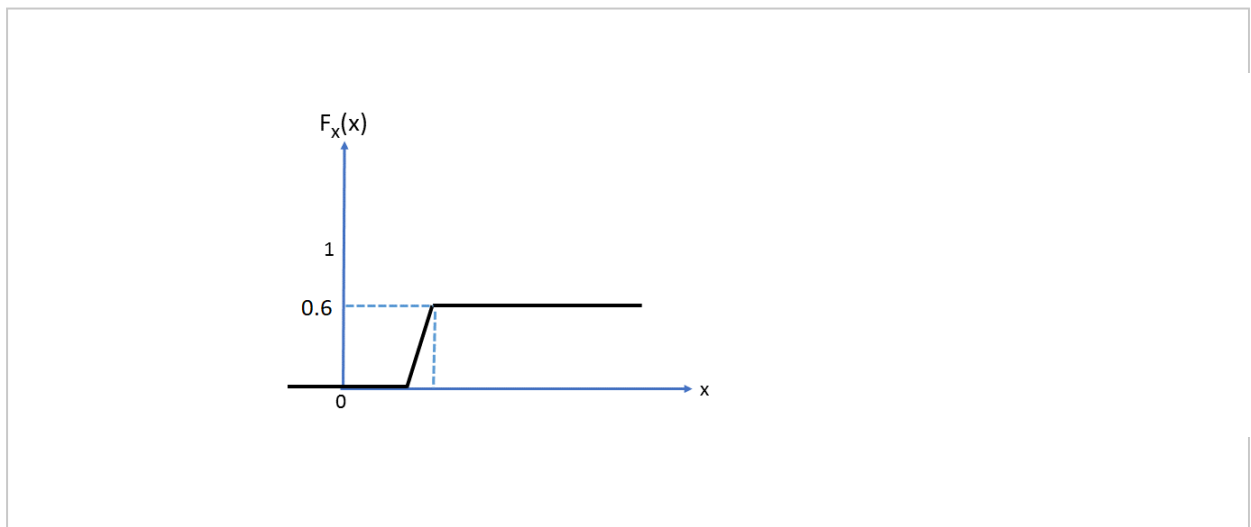# 2. CDF

Problem Set due Mar 13, 2020 05:29 IST   *Completed*

Problem 2. CDF

2/4 points (graded)

For each one of the following figures, identify whether it is a valid CDF. The value of the CDF at points of discontinuity is indicated with a small solid circle.
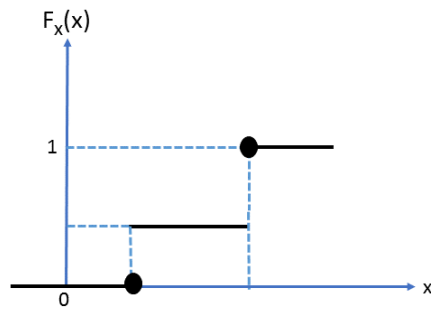
1.

Note: Assume that the above function never goes above 0.6.

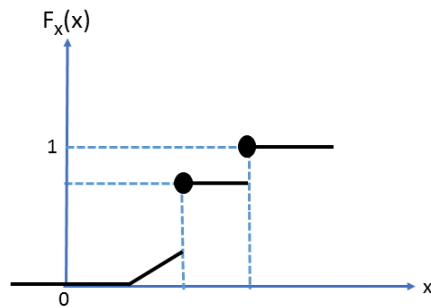It is not a valid CDF ▾   ✔ **Answer:** It is not a valid CDF

2.

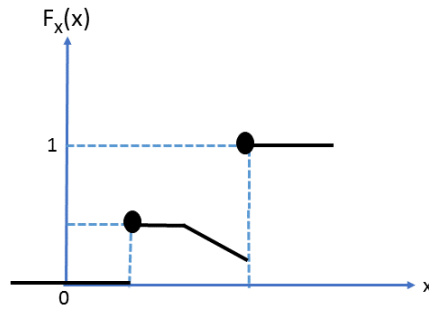It is a valid CDF ⌄   ✖ **Answer:** It is not a valid CDF

3.

It is not a valid CDF ⌄   ✖ **Answer:** It is a valid CDF

4.

$F_x(x)$

It is not a valid CDF ⌄   ✔ **Answer:** It is not a valid CDF

Solution:

1. No, because $\lim\limits_{x\to\infty} F_X(x) \neq 1$.

2. No, because it is not right-continuous.

3. Yes, it is a valid CDF (limiting values are as required, and it is monotonic, and right-continuous).

4. No, because it is not monotonic.

Submit   You have used 1 of 1 attempt

ⓘ   Answers are displayed within the problem

Discussion

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Topic: Unit 5: Continuous random variables:Problem Set 5 / 2. CDF

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? **Question 2 - Reason for the answer**   2 new_   11
[edited to remove answer before deadline]

💬 [STAFF] Q 2.1 is misleading

As there isn't any other marks at y axis except 1, I decide that this is just value till which function rises

[Staff] answer 1
I think the picture is misleading, at a first sight I thought the 1 referred to the top line

1

[Staff] Answer to 1
I think answer to question 1 is not correct. Please check.

11

I am tired
Did not notice that there is a "1" mark. It is 1:15 AM here, been working whole day. I can barely keep ...

11

[Staff] Grader for figure 1 is in correct?
I think the grader for fig. 1 is incorrect? It must be have dot for not differential points in the fig?

17

Solid circles
Beware of solid circles at the point of discontinuity :)

1

Helpfull link
Here is a [link](https://study.com/academy/answer/explain-what-makes-a-cdf-valid.html) to a post tha...

1

(Staff) Why keep the amiguous questions?
For 1a. The interpretation changes the answer to the question. A reason was given by the Community...

6

[Staff] Submit from Mobile by mistake unanswered questions
I am terribly sorry I used the mobile for navigation and it fell down and by coincedence got the submi...

2

Is question 1 a joke?
This question is clearly not up to the standard and actually questions our ability to understand figure...

1

Question 2
I need clarification on answer for Q2. I got it wrong.

2

Answer Explanations [for Staff]
Could you provide explanations for answers

4