CDF Random Variable

What does CDF stand for?

Given the table of the pmf for a random variable. Fill the table

x	1	2	3	4	5
f(x)	.2	.25	.15	.22	.18
F(x)					

x	F(x)
1	0.1002
2	0.1268
3	0.6468
4	0.7598
5	0.7717
6	0.9001
7	0.9239
8	0.9496
9	0.9743
10	0.9880
11	0.9905
12	1.000

a. P(X = 4)

b. P (X < 9)

c. P (X ≤ 3)

g. P (5 < X < 9)

f. P (X ≥ 13)

g. P (8 ≤ X < 12)

h. P (7 ≤ X ≤ 11)

I. P (10 < X)

The CDF of a random variable is given below.

x	1	2	3	4	5	6	7	8
$F(x)$	.08	.15	.26	.43	.78	.82	.88	1.00

Determine a) $P(X < 5)$ b) $P(X \leq 3)$ c) $P(6 \leq X)$

d) $P(2 \leq X)$ e) $P(3 \leq X < 7)$ f) $P(3 < X \leq 7)$ g) $P(X \leq 4.5)$

20. Determine the value(s) of c that makes the table below a CDF.

x	1	2	3	4	5	6	7	8
$F(x)$	.2	.25	.45	.55	c	.87	.95	1.00

21. Determine the value(s) of c that makes the table below a CDF.

x	1	2	3	4	5	6	7	8
$F(x)$	.1	.25	.46	c	.71	.72	.86	1.00