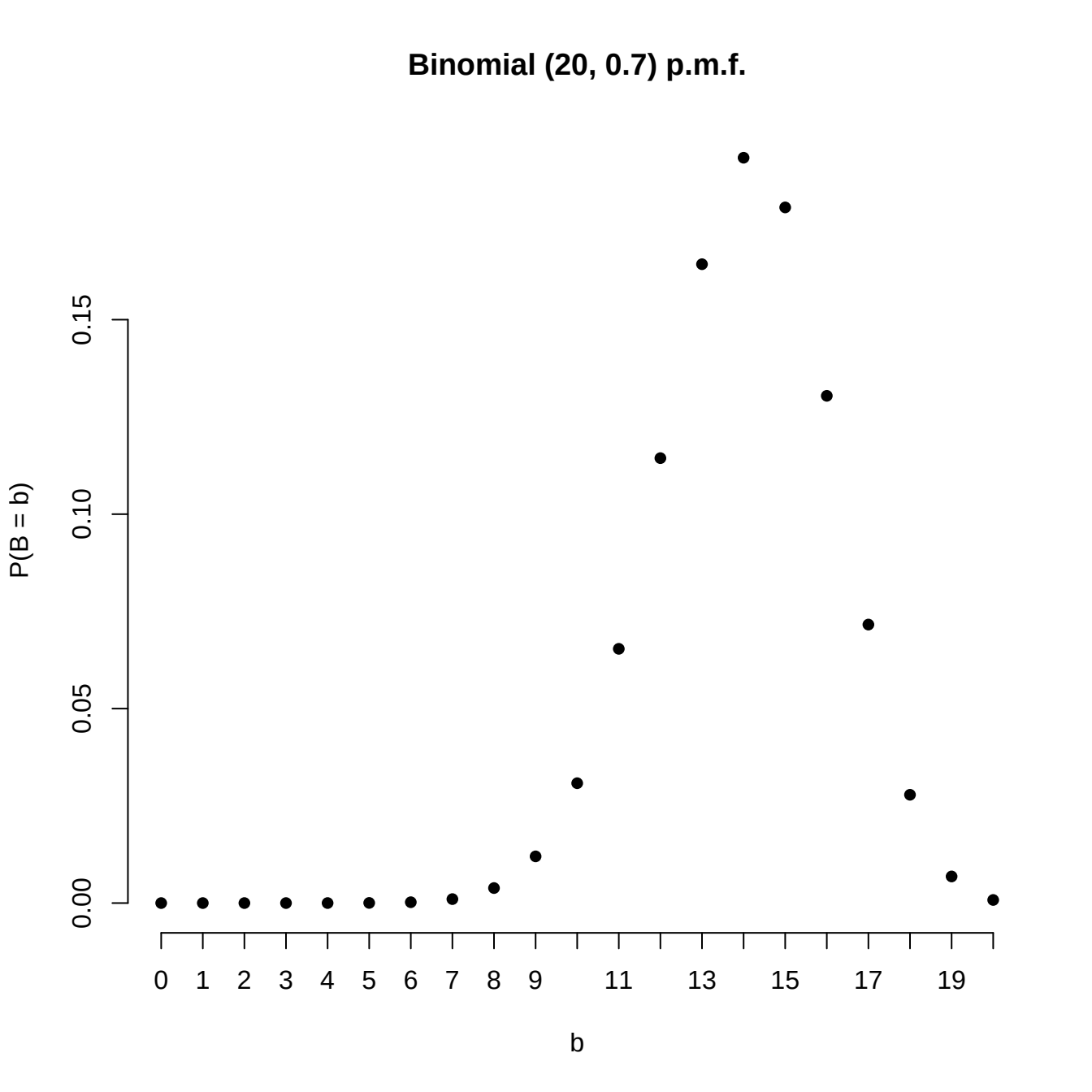
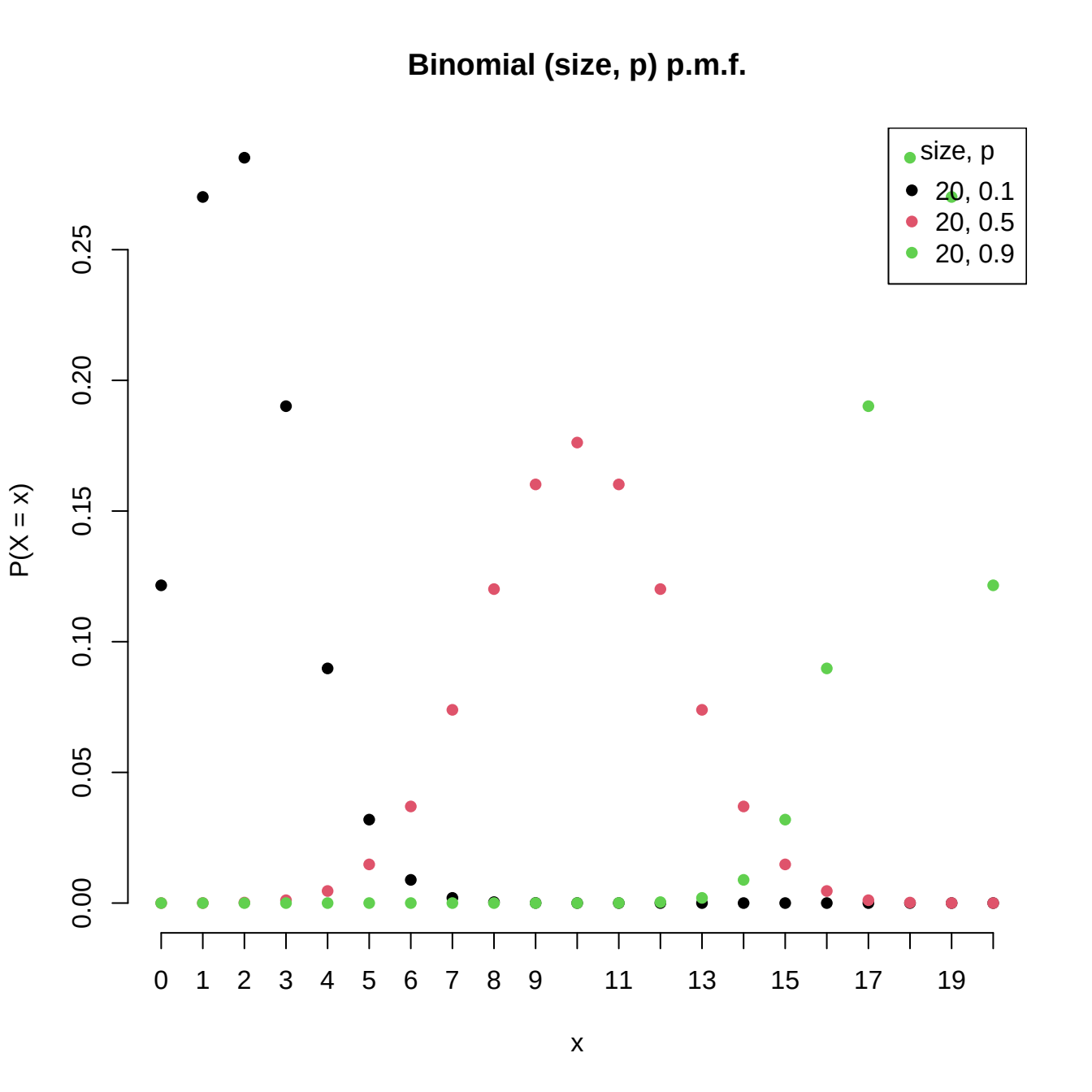
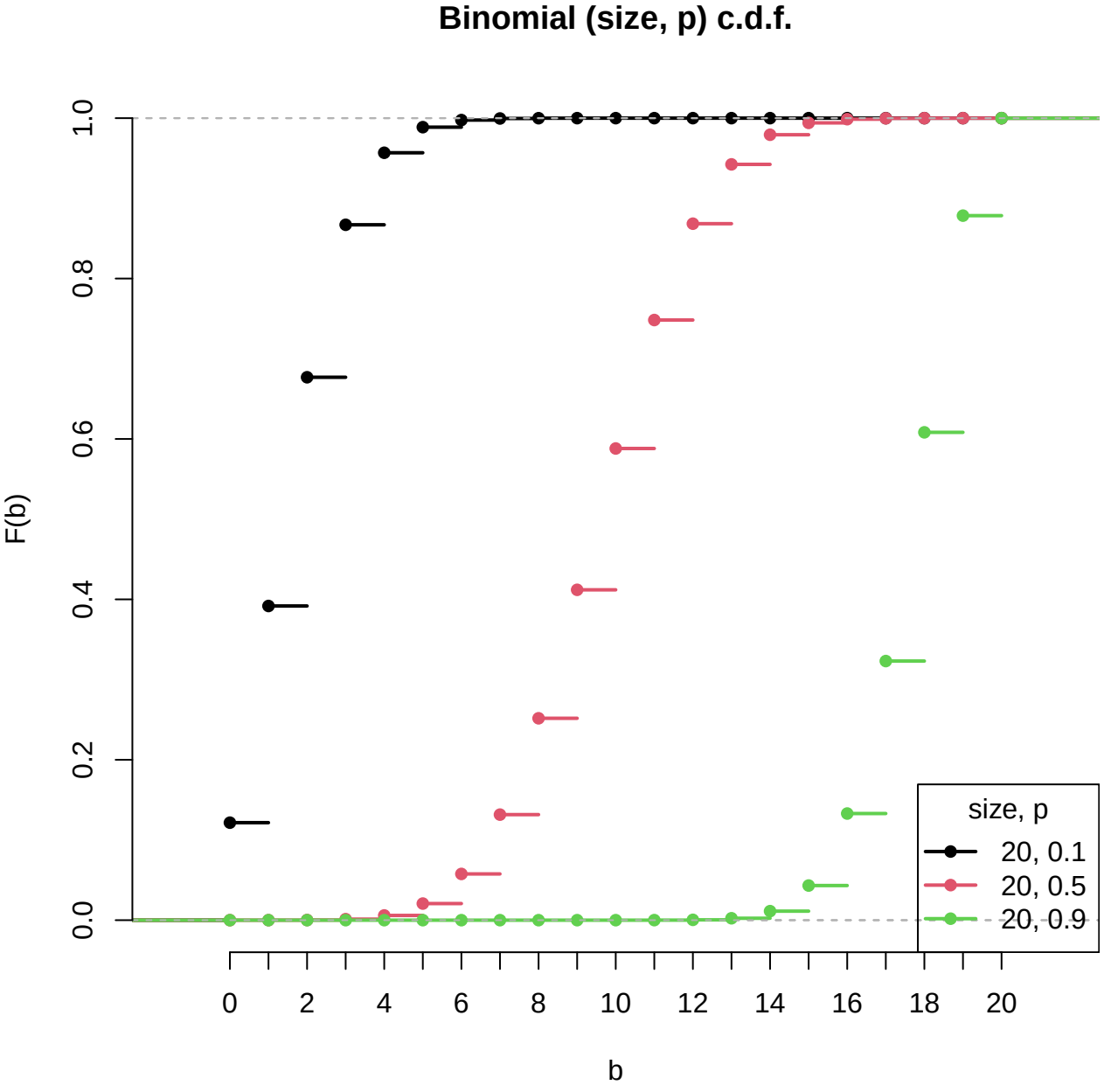
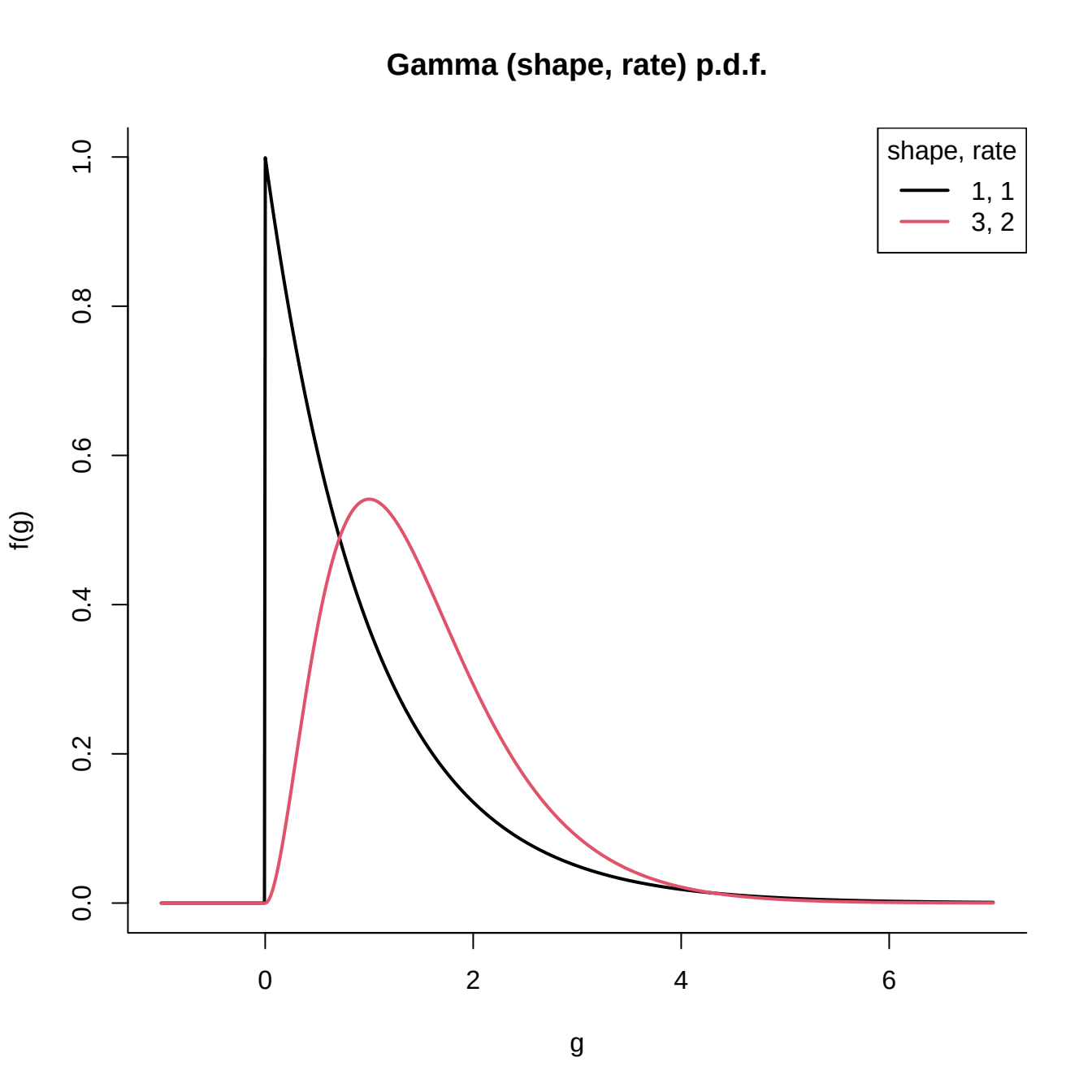
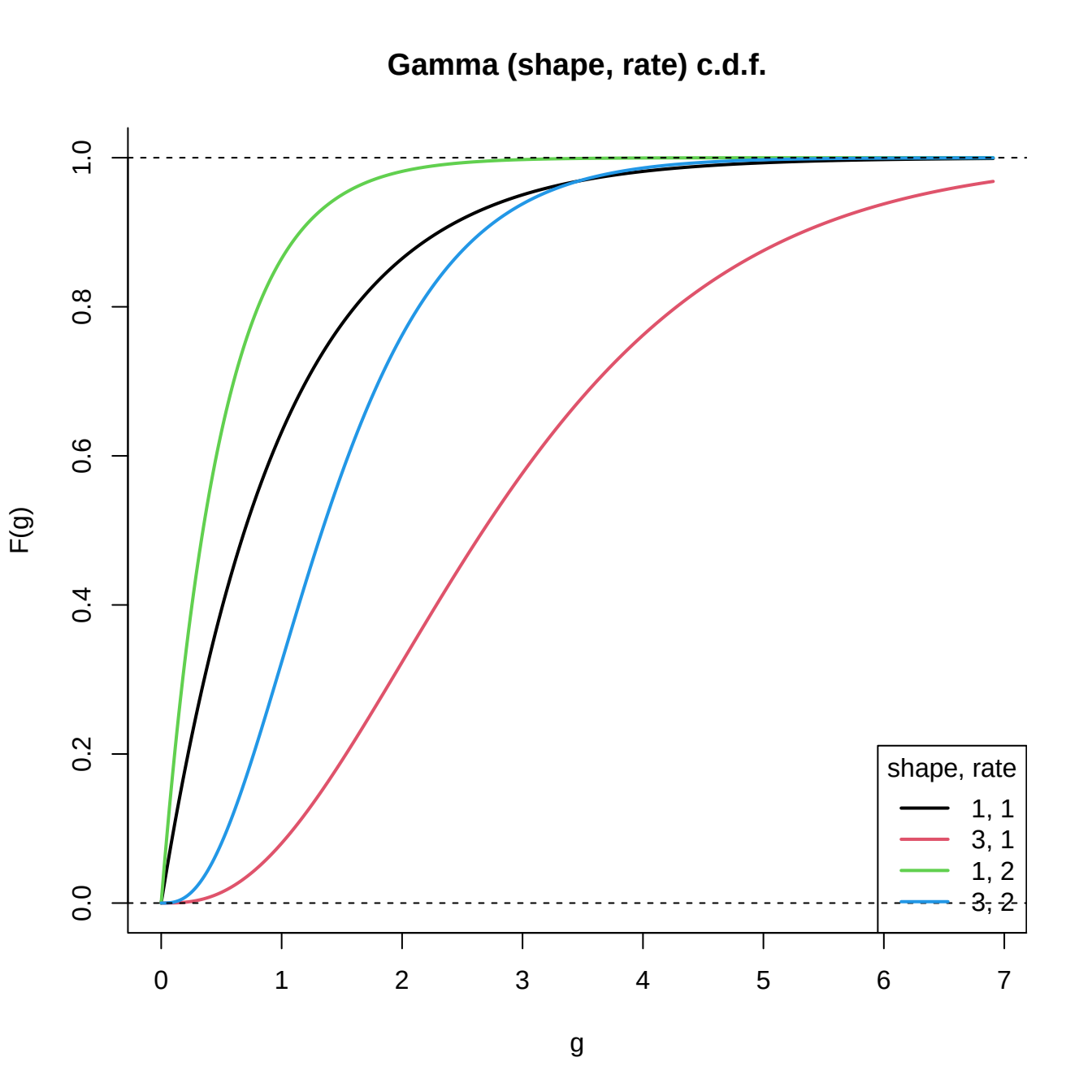
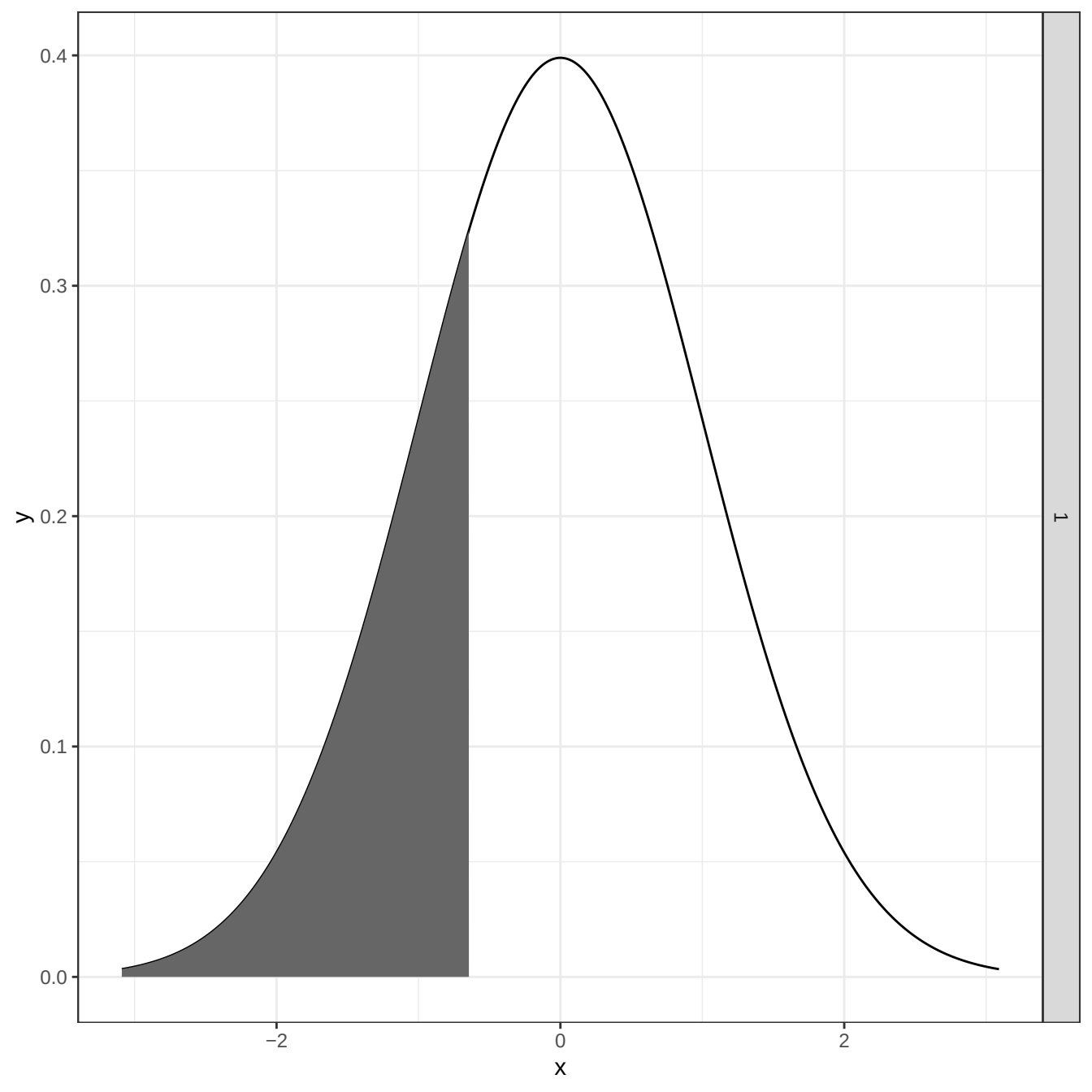

Binomial (20, 0.7) p.m.f.
P(B = b)
0.00
0.05
0.10
0.15
0 1 2 3 4 5 6 7 8 9 11 13 15 17 19
b

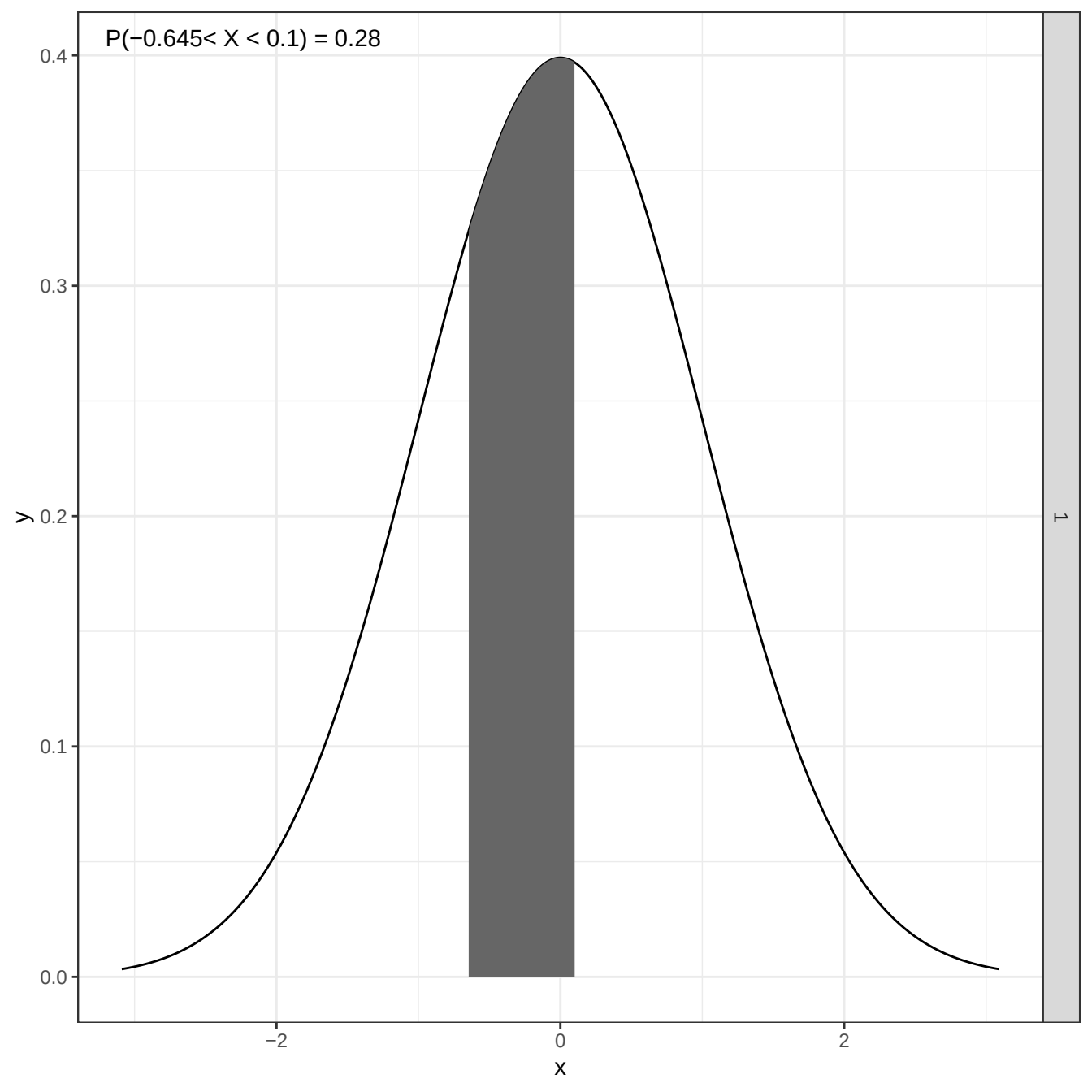

Binomial (size, p) p.m.f.
size, p
20, 0.1
20, 0.5
20, 0.9
P(X = x)
0.00
0.05
0.10
0.15
0.20
0.25
0
1
2
3
4
5
6
7
8
9
11
13
15
17
19
x

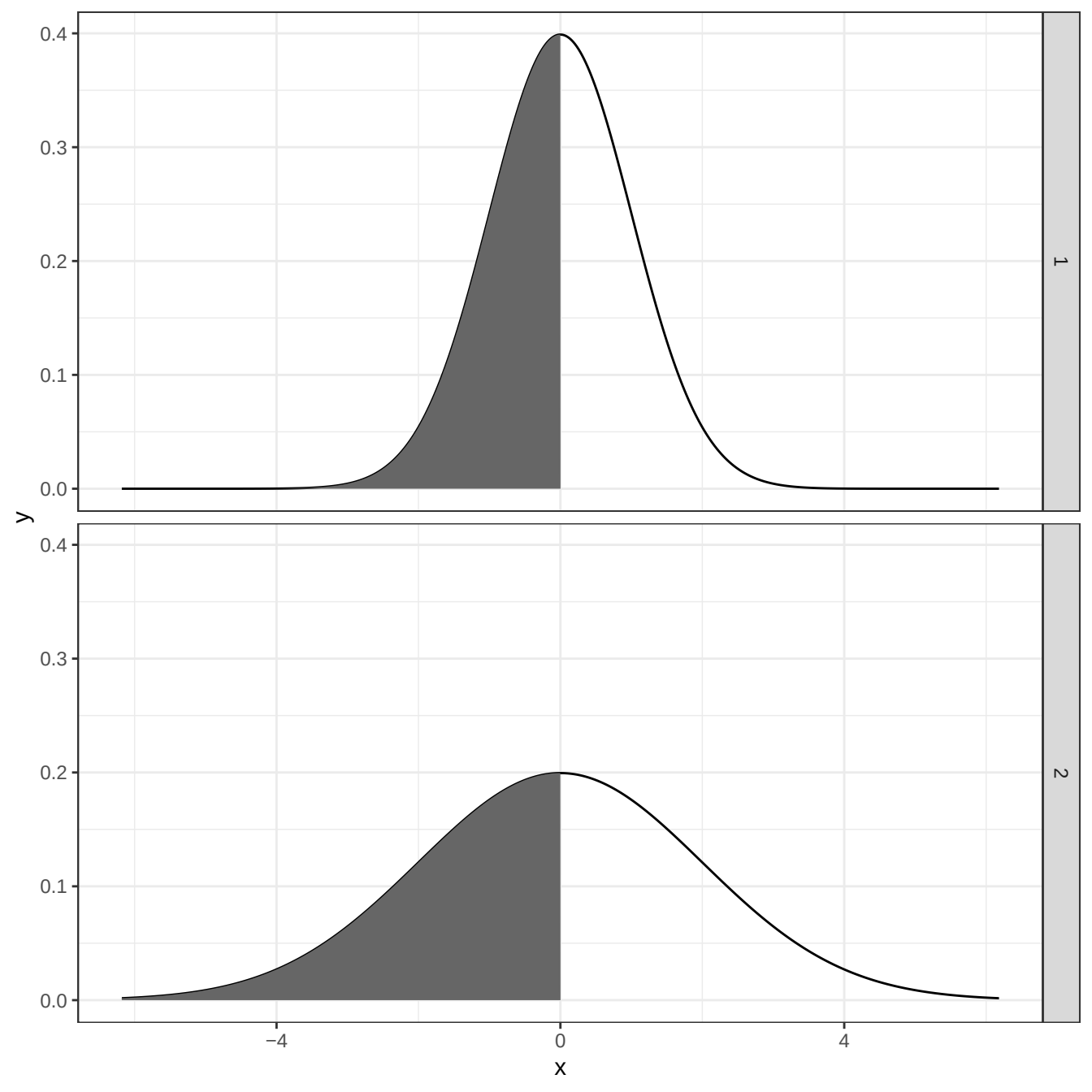

Binomial (size, p) c.d.f.
F(b)
1.0
0.8
0.6
0.4
0.2
0.0
0
2
4
6
8
10
12
14
16
18
20
b
size, p
20, 0.1
20, 0.5
20, 0.9

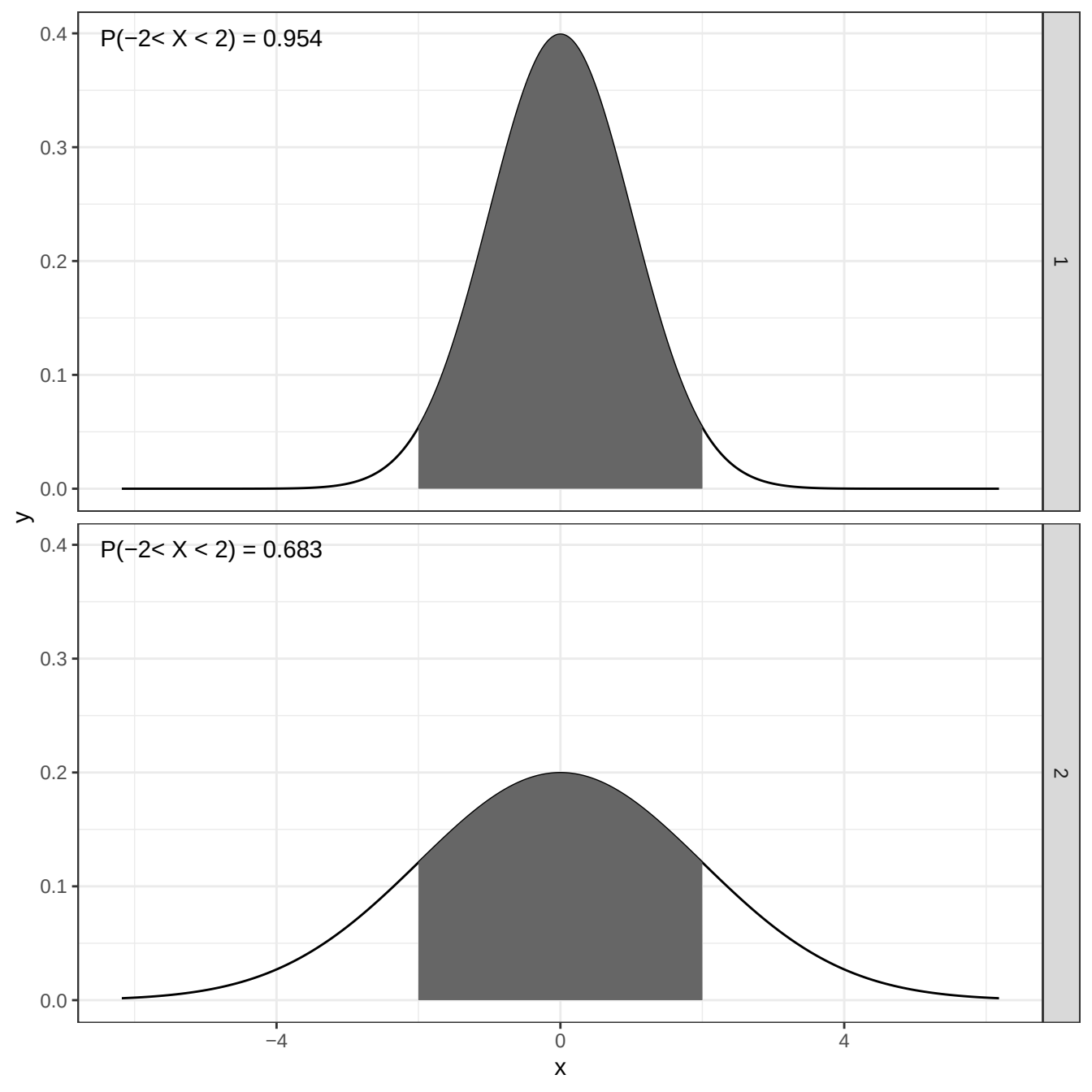

Gamma (shape, rate) p.d.f.
shape, rate
1, 1
3, 2
f(g)
0.0
0.2
0.4
0.6
0.8
1.0
0
2
4
6
g

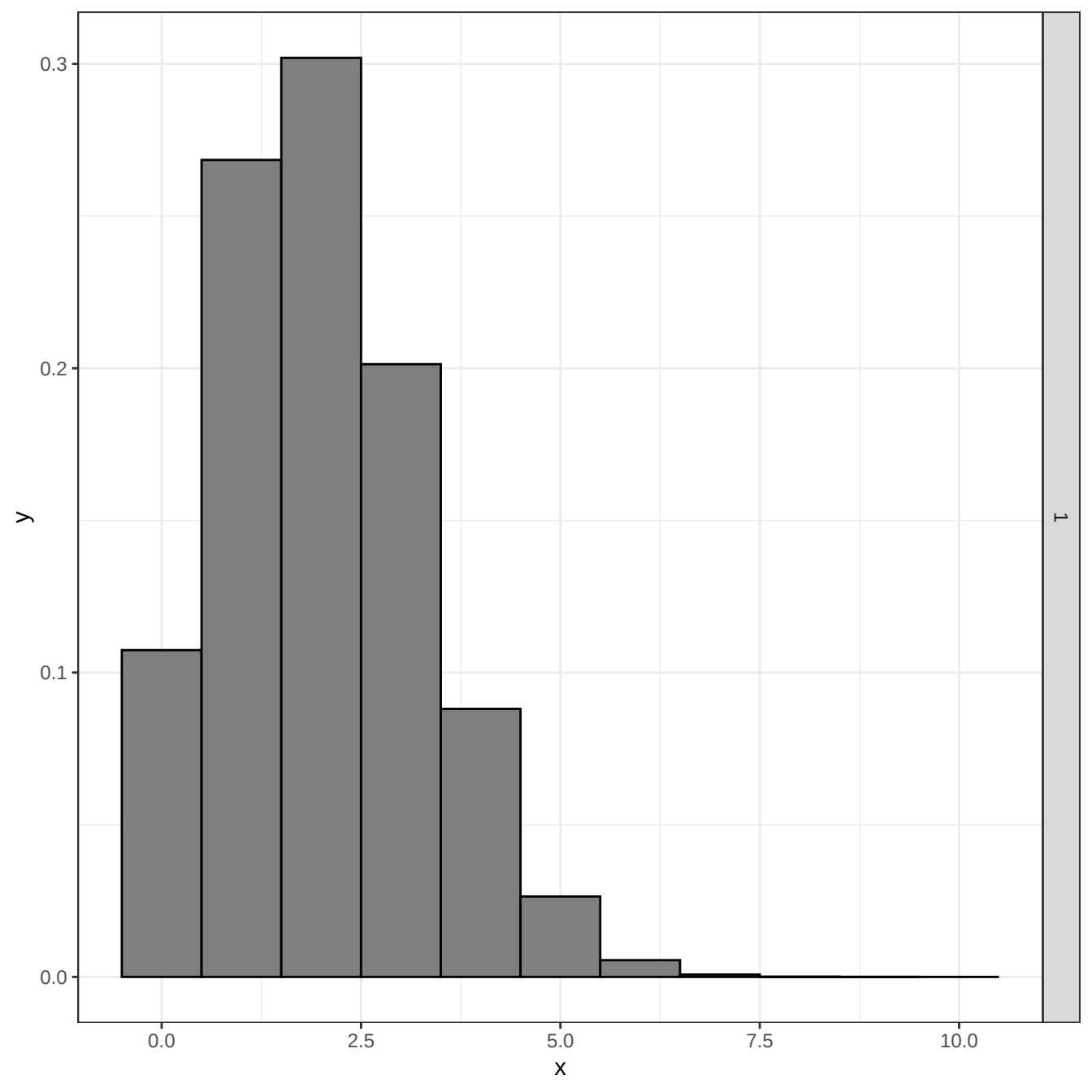

Gamma (shape, rate) c.d.f.
F(g)
0.0
0.2
0.4
0.6
0.8
1.0
0
1
2
3
4
5
6
7
g
shape, rate
1, 1
3, 1
1, 2
3, 2

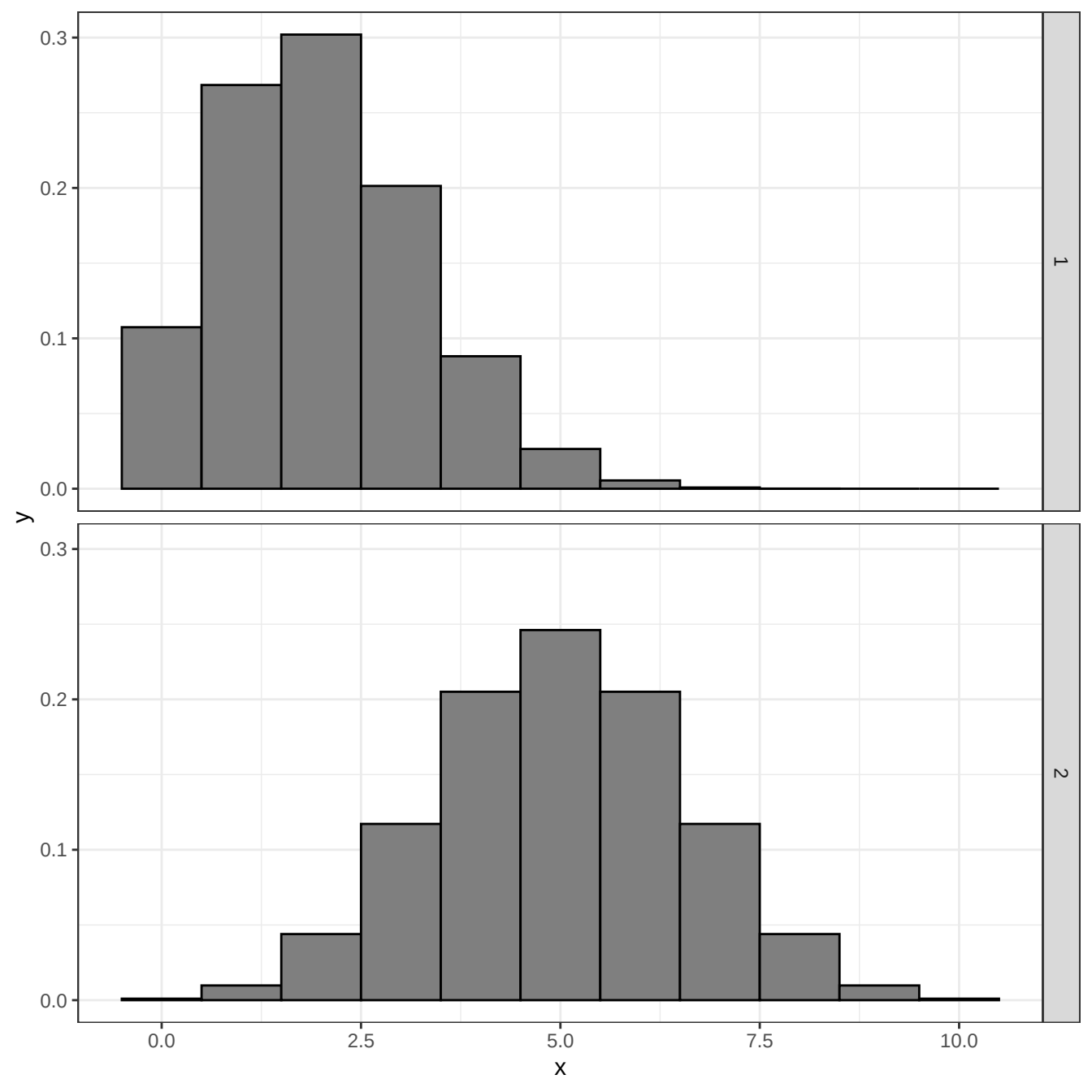

0.4
0.3
0.2
0.1
0.0
y
−2
0
2
x
1

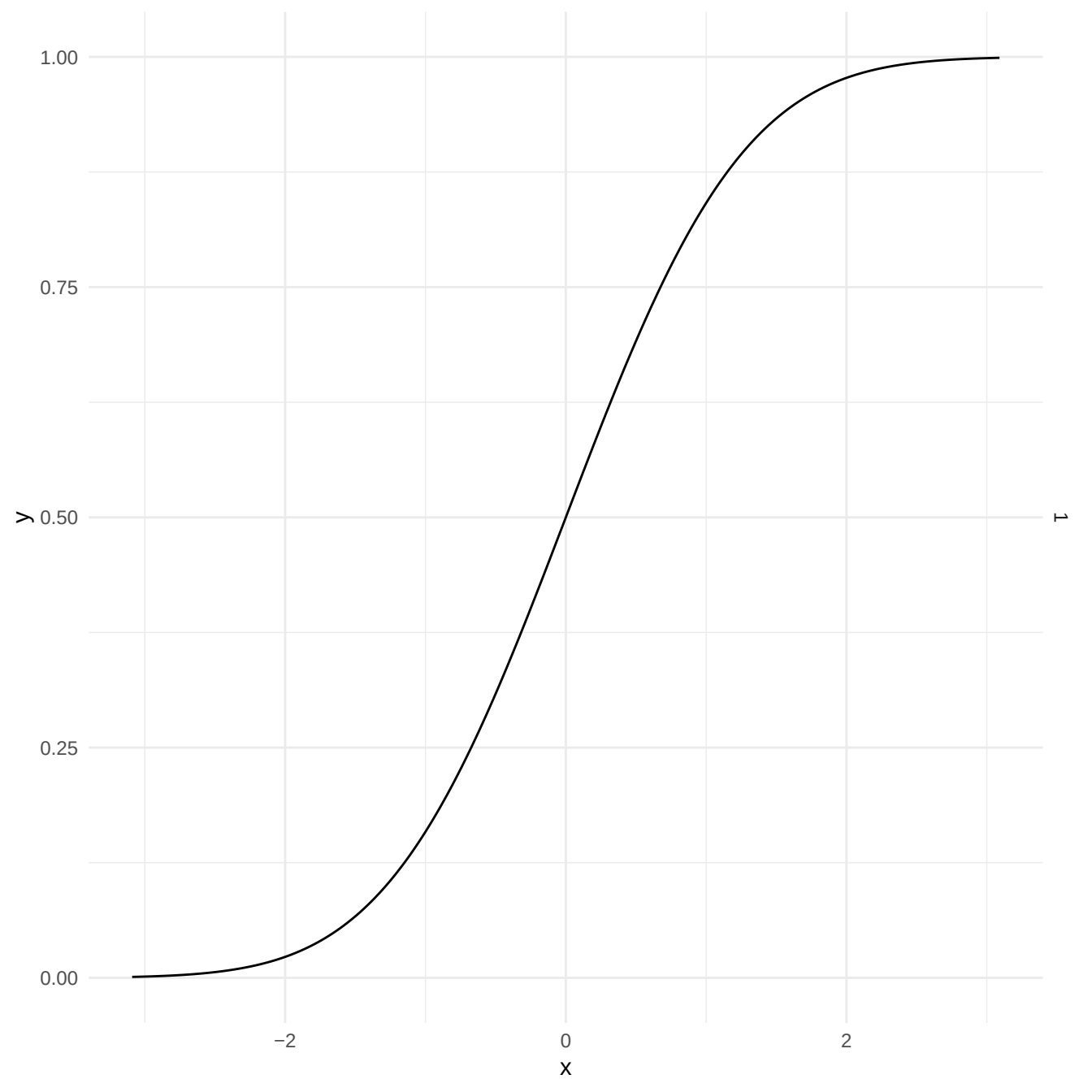

P(−0.645< X < 0.1) = 0.28
0.4
0.3
0.2
0.1
0.0
y
−2
0
2
x
1

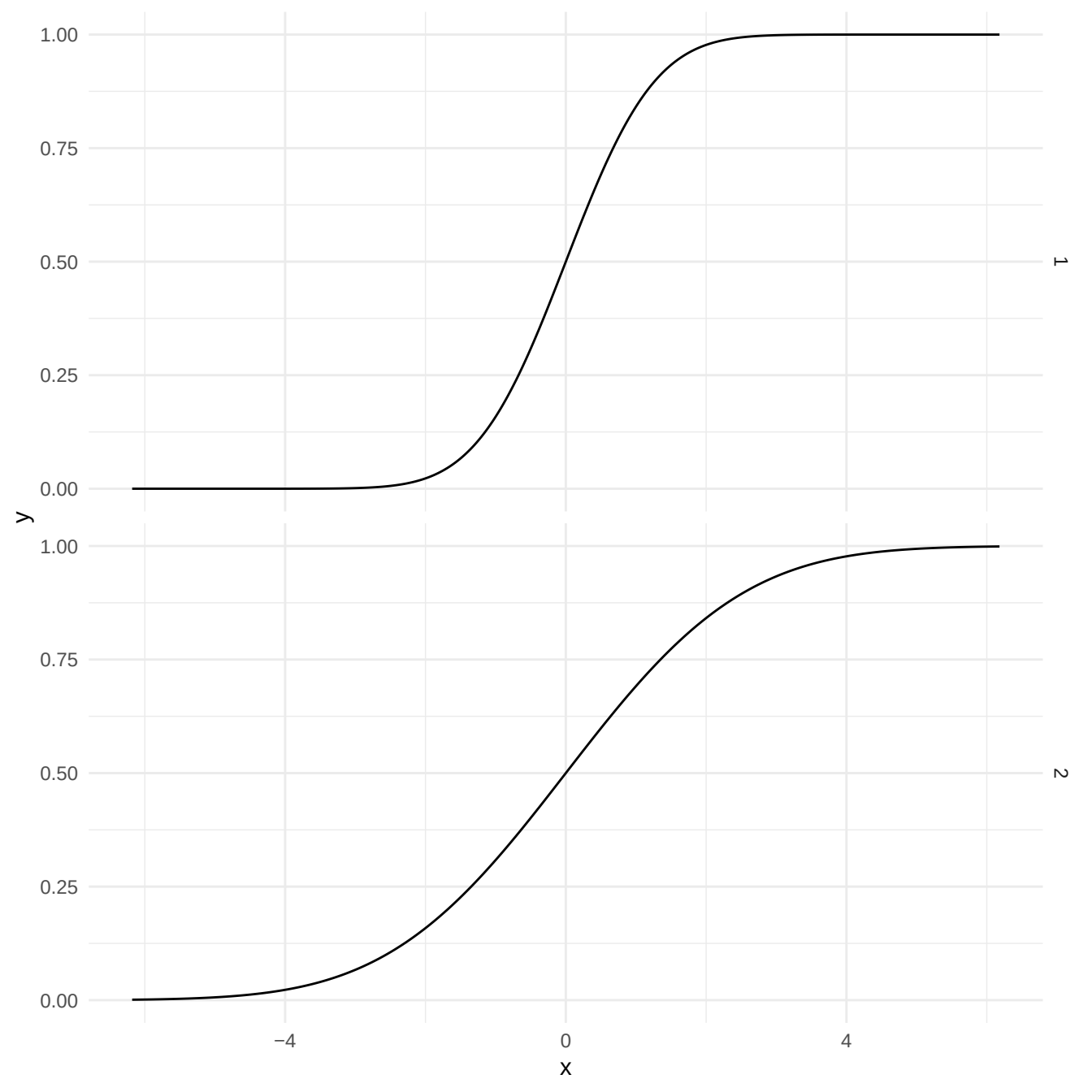

0.4
0.3
0.2
0.1
0.0
y
1
2
−4
0
4
x

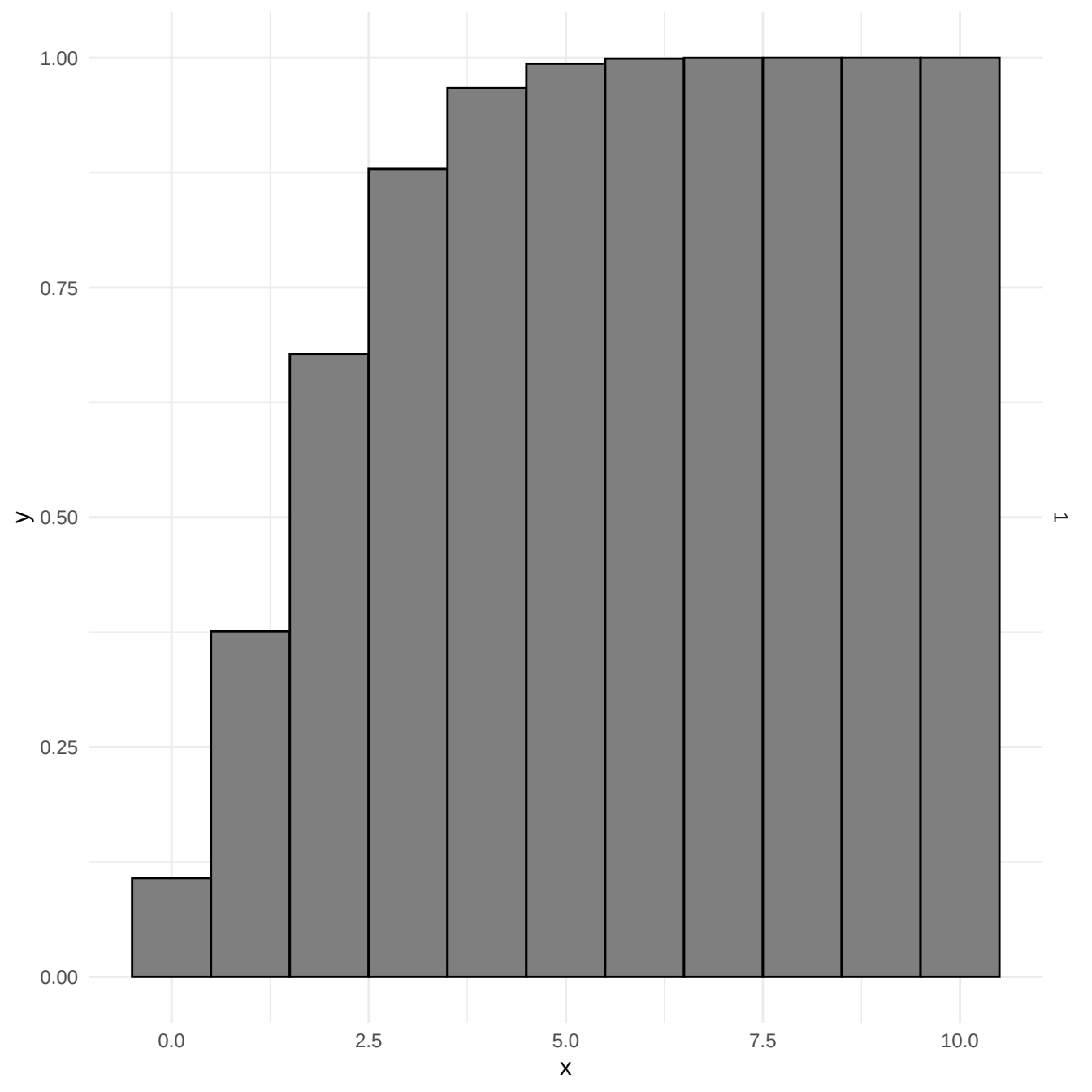

P(−2< X < 2) = 0.954
P(−2< X < 2) = 0.683
0.4
0.3
0.2
0.1
0.0
y
1
2
−4
0
4
x

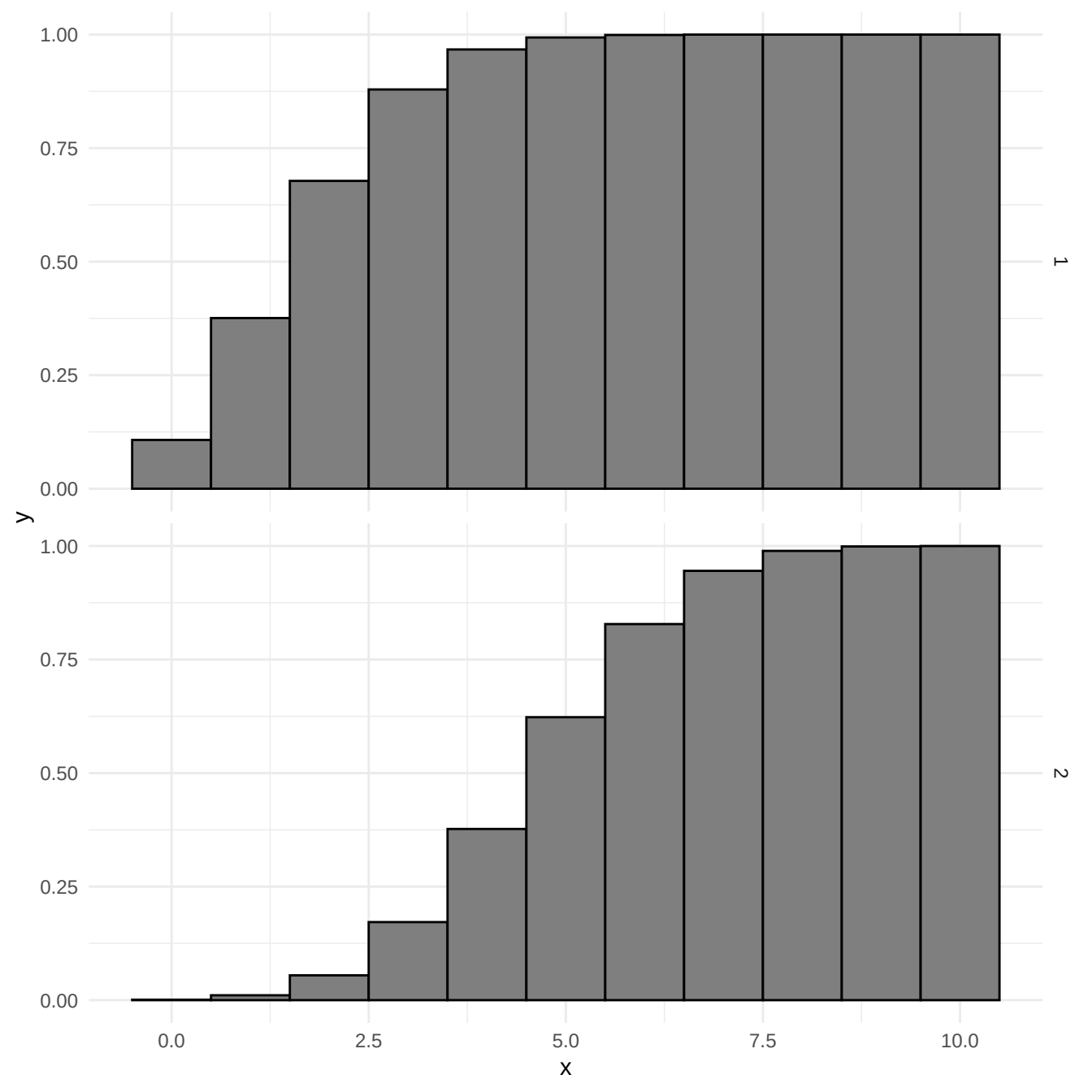

0.3
0.2
0.1
0.0
y
0.0
2.5
5.0
7.5
10.0
x
1


0.3
0.2
0.1
0.0
y
1
2
0.0
2.5
5.0
7.5
10.0
x


1.00
0.75
0.50
0.25
0.00
y
−2
0
2
x
1


1.00
0.75
0.50
0.25
0.00
y
1
1.00
0.75
0.50
0.25
0.00
2
−4
0
4
x


1.00
0.75
0.50
0.25
0.00
y
0.0
2.5
5.0
7.5
10.0
x
1


1.00
0.75
0.50
0.25
0.00
y
1
1.00
0.75
0.50
0.25
0.00
2
0.0
2.5
5.0
7.5
10.0
x