

1, page 32, Q.3.36: Choice E should be 0.33.

1, p.95, sol. 5.29: X follows a zero-truncated Geometric Distribution with $\beta = 1/2$.

1, p.272, sol. 14.26, revise my comment:

If we have a member of the (a, b, 1) class, then for $x \geq 1$: $f(x+1)/f(x) = a + b/(x+1)$.

Number of Days	Observed	$f(x+1)/f(x)$
1	9,190	0.599
2	5,509	0.591
3	3,258	0.597
4	1,944	0.597
5	1,160	0.597
6	693	0.603
7	418	

$a \cong 0.6$ and $b \cong 0$. a is positive and thus we have a Negative Binomial.

For the Negative Binomial $b = (r-1)\beta/(1+\beta)$. Thus $b \cong 0$, implies that $r \cong 1$.

$a = \beta/(1+\beta) \cong 0.6$ and thus $\beta \cong 1.5$.

Thus the data may have been drawn from a Zero-Modified Geometric, with $\beta \cong 1.5$.

1, p.392, sol. 9.1, in the final part of my comment:

Thus for a driver with no claims in years **one and two**, the probability of no claims in year **three** is:

2, p. 76, solution to the exercise at the bottom of the page:

Of 130 claims, there are 109 claims greater than 25,000, thus an estimate of $S(25,000) = 109/130$.

Of 130 claims, 3 claims are within 5000 of 25,000. Thus this interval covers a probability of 3/130.

Thus an estimate of $f(25,000) = (3/130)/5000$.

Therefore, $h(25,000) \cong \{(3/130)/5000\} / (109/130) = 0.0000055$.

2, pages 76 and 573: For a given age x, the hazard rate is the density of the deaths, divided by the **probability of still being alive** at age x.

2, page 279: the density of the LogGamma is $\frac{\ln(x)^{\alpha-1}}{\theta^\alpha x^{1+1/\theta} \Gamma(\alpha)}$.

2, p. 380, sol. 27.2: $f'(x) = 720x(1-x)^7 - 2520x^2(1-x)^6$. Final answer is OK.

2, p. 431, solution 30.9:

For $\tau < \alpha^2$, Inverse Paralogistic has a **heavier** righthand tail than the Paralogistic.

For $\tau > \alpha^2$, Inverse Paralogistic has a **lighter** righthand tail than the Paralogistic.