Introduction to Distance Sampling

Line transect analysis of duck nests with Distance

1. You should get very similar estimates of density from different models, provided those models fit the data well. Remember you have
   - the χ^2 goodness-of-fit statistic (why are there 3 of these?)
   - the Kolomogorov-Smirnov and Cramer von Mises tests
   - q-q plot
   - The negative exponential model does not fit

Model	$\hat{D}$ (nests/km^2)	95% c.i. for *D*
Half-normal (no adjustments)	49.7	(44.2, 55.9)
Fourier series (uniform + cosine)	51.0	(44.9, 58.0)
Hazard-rate (no adjustments)	49.4	(42.3, 57.7)

Compare with 48.6 nests / km^2 and 48.7 nests / km^2 from computations done by hand in earlier exercise.