$\Gamma(\alpha)$

↓

Gamma function

Poisson parameters

Average number λ of successes per unit of time/space, time/length/area/volume &.

One side of a sheet of plywood has an average of 0.43 knots per square foot. What is the the prob of 5 or more knots on a side of a 4'x8' sheet.

$P(X \geq 5) = 1 - P(4; (0.43)(4 \cdot 8)) =$

Exponential, β is ave length of time btwn successes

β has units of $\frac{\text{time}}{\text{success}} = \frac{1}{\lambda}$ $\frac{\text{success}}{\text{time}}$

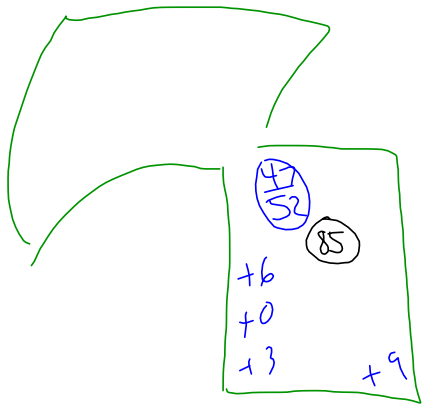
Dutch Bros gets 1 car every 140 sec on average between 7&8 AM. What is the prob the next car will arive within 60 sec of the last one's arrival?

$$P(X \leq 60) = F(60) = 1 - e^{-\frac{60}{140}} = 0.3486$$

For Monday: 4.7: 1-8 For each,

* give distribution, as a word
* (i), (ii) OR (iv), (v)

use if more than one value


47
52
85
+6
+0
+3
+9