Několik vzorečků jako nápověda k písemce

(k čemu který je, už samozřejmě nutno vědět)

$$F(x) = 1 - \mathrm{e}^{-x/\theta}, \quad x > 0 \qquad \blacksquare \qquad f(x) = (1/\theta)\,\mathrm{e}^{-x/\theta}, \quad x > 0$$

$$P(k) = \binom{n}{k} p^k (1-p)^{n-k}, \quad k = 0, 1, \ldots, n \qquad \blacksquare \qquad P(k) = \mathrm{e}^{-\lambda}\,\frac{\lambda^k}{k!}, \quad k = 0, 1, 2, \ldots$$

$$\overline{X} \pm \frac{\sigma}{\sqrt{n}} u_{1-\alpha/2} \qquad \blacksquare \qquad \overline{X} \pm \frac{s}{\sqrt{n}} t_{1-\alpha/2}(n-1) \qquad \blacksquare \qquad \frac{(n-1)\sigma^2}{\chi^2_{1-\alpha/2}(n-1)}, \frac{(n-1)\sigma^2}{\chi^2_{\alpha/2}(n-1)}$$

$$\frac{\overline{X} - \mu}{\sigma}\sqrt{n} \sim \mathrm{N}(0,1) \qquad \blacksquare \qquad \frac{\overline{X} - \mu}{s}\sqrt{n} \sim t_{n-1} \qquad \blacksquare \qquad \frac{(n-1)s^2}{\sigma^2} \sim \chi^2_{n-1}$$

$$\frac{\overline{X}_1 - \overline{X}_2 - (\mu_1 - \mu_2)}{\sqrt{(n_1-1)s_1^2 + (n_2-1)s_2^2}} \sqrt{\frac{n_1 n_2 (n_1 + n_2 - 2)}{n_1 + n_2}} \sim t_{n_1+n_2-2}$$

$$\sum\sum \frac{(n_{ij} - o_{ij})^2}{o_{ij}} \approx \chi^2_{(r-1)(s-1)} \qquad \blacksquare \qquad \frac{r}{\sqrt{1-r^2}}\sqrt{n-2} \sim t_{n-2}$$