1. Compare the Milne solution $ds^2 = -dt^2 + t^2(d\chi^2 + \sinh^2 \chi d\Omega^2)$ with the Minkowski space-time.

2. Find the volume of $t = const$ hypersurface for models of the Universe with $k = 1, k = \pm 1$.

3. Find the solution of the Friedman model for dust-matter, for $k = 0$.

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