$\begin{array}{c} \mathrm{MATH} \ 101 \ \text{--} \ 2 \ (\mathrm{FALL} \ 2023) \\ \mathrm{QUIZ} \ 4 \end{array}$

Full name:	Student number:	Total: / 10 pts.
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(1) Evaluate the following limit

$$\lim_{n\to\infty}\sum_{i=1}^n\sqrt{\frac{i}{n^3}}.$$

(2) Evaluate the following integral

$$\int_{-1}^{0} x^2 \sqrt{x+1} \, dx.$$

Date: Kasim 23, 2023.