**Oppgave 40**

$$\begin{aligned}\lim_{x\to 0^+} \frac{1}{1+2^{\frac{1}{x}}} &= \lim_{k\to\infty} \frac{1}{1+2^k} \\ &= 0. \\ \lim_{x\to 0^-} \frac{1}{1+2^{\frac{1}{x}}} &= \lim_{k\to-\infty} \frac{1}{1+2^k} \\ &= 1.\end{aligned}$$