

MATH 140A Review: Helpful Algebraic techniques

1. Rewrite $\sqrt{2} + \sqrt{3}$ as a fraction with no radicals in the numerator.
2. Rewrite $\sqrt{n+2} - \sqrt{n-1}$ as a fraction with no radicals in the numerator and then compute the limit as $n \rightarrow \infty$.
3. What is the limit of $a_n = n^{2/n}$ as $n \rightarrow \infty$?