Challenge Problem 5

 $\begin{array}{c} (\text{due March 22}) \\ \text{Math 130 } Kovitz \text{ Spring 2018} \end{array}$

Let $a = 4^{2.75}$ and $b = 4^{-0.75}$.

- (a) Find exact radical expressions with rationalized denominators for: a + b, a b.
- (b) Find approximate 4-place-decimal values by using a calculator for: $a+b,\,a-b.$
- (c) Then show that the radical expressions yield the same 4-place-decimal values.