2. [11 points] Solve all the following equations algebraically. Your answers must be written in exact form. Show all your work to receive full credit.

**a**. [3 points]  $10^{3\log(x)} = 7$ 

**b**. [4 points]  $\log(27y) - \log(2y+1) = 1$ 

**c**. [4 points]  $z \ln(7z + 17) = 0$ 

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x =\_\_\_\_\_.

 $y = _{-}$ 

*z* =\_\_\_\_\_.