

Written HW17 – MATH 2502 Spring 2021

**Due by 19 April for timely completion credit**

Find the first **five** nonzero terms of the Taylor series of  $f(x)$  centered at  $c$  *using a computer to find the coefficients*  $f^{(k)}(c)$  as was done in the 14 April class. Include a Desmos plot of the given function as well as the Taylor series approximation you found.

1.  $f(x) = \tan(e^x)$ ;  $c = 7$
2.  $f(x) = \sin(\ln(x))e^{-x}$ ;  $c = 5$