(1) For the following assume $a = 0$ and find $T_3(x)$:

(a) $f(x) = \dfrac{1}{1-x}$

Solution:
https://goo.gl/3Cy5BD

(b) $f(x) = e^x$

Solution:
https://goo.gl/bdbCkO

(c) $f(x) = \ln(1+x)$

Solution:
https://goo.gl/mbstpR

(d) $f(x) = xe^x$

Solution:
https://goo.gl/vDjX7A

(2) Find $T_4(x)$ for the following:

(a) $f(x) = x^5 + 2x^3 + x$, $a = 2$

    Solution:
    `https://goo.gl/22MEz0`

(b) $f(x) = e^{2x}$, $a = 3$

    Solution:
    `https://goo.gl/gr6XBz`

(c) $f(x) = \sin(x)$, $a = \pi$

    Solution:
    `https://goo.gl/x7Mn7E`

(d) $f(x) = \sqrt{x}$, $a = 16$

    Solution:
    `https://goo.gl/9RphS1`