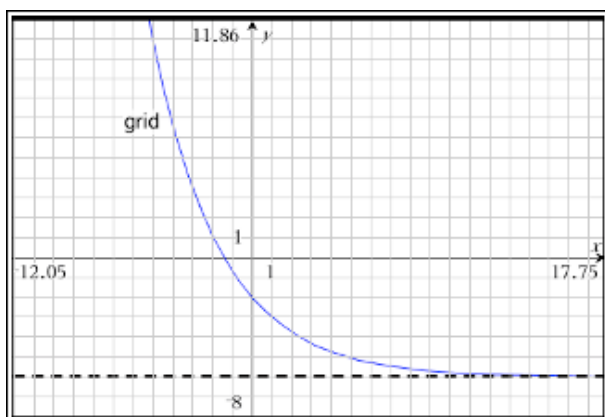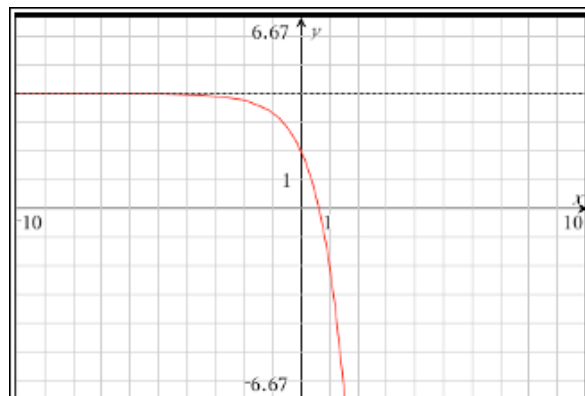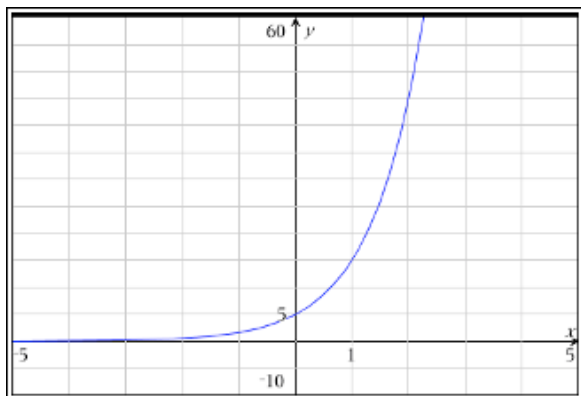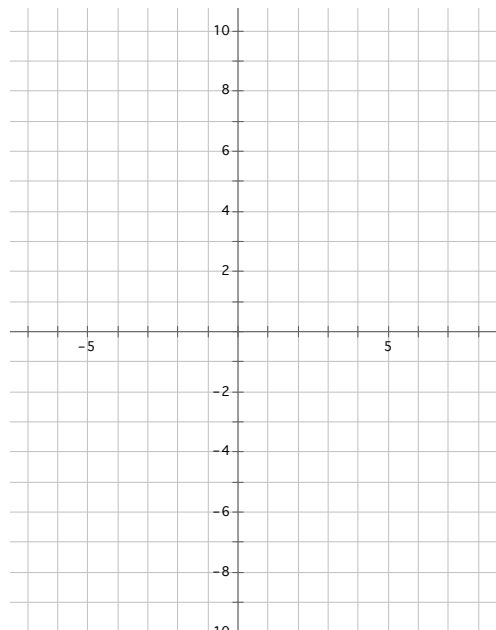Exponential Functions Practice

1.   Write the equation of the exponential function.
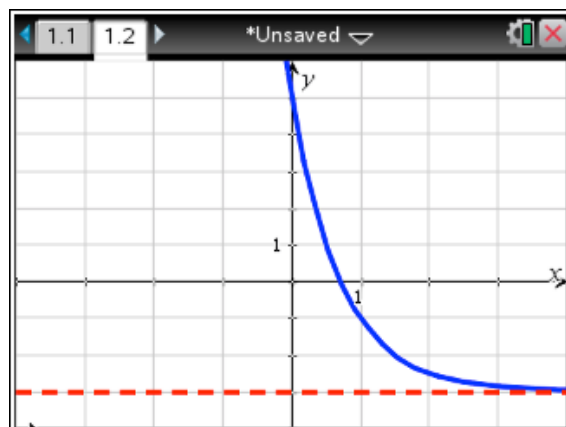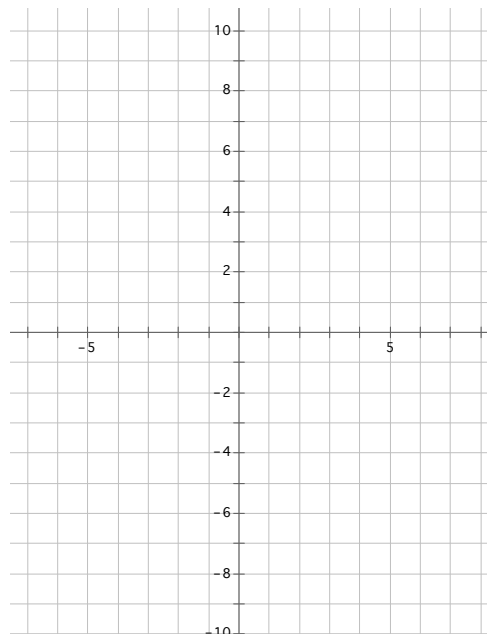
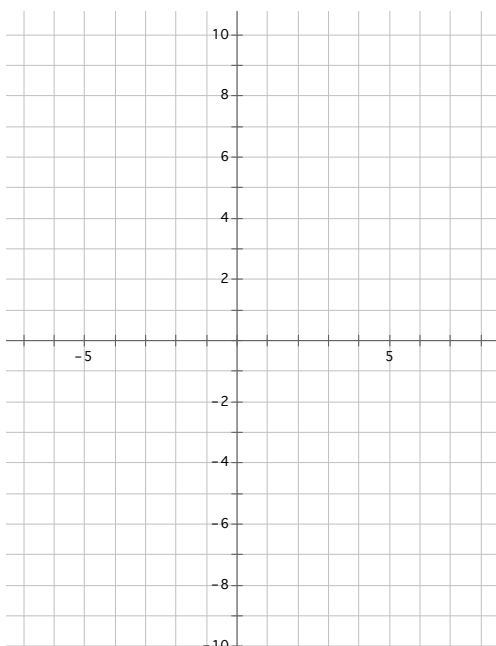2. Graph each exponential function.

$$f(x) = 9\left(\frac{1}{3}\right)^x - 2$$
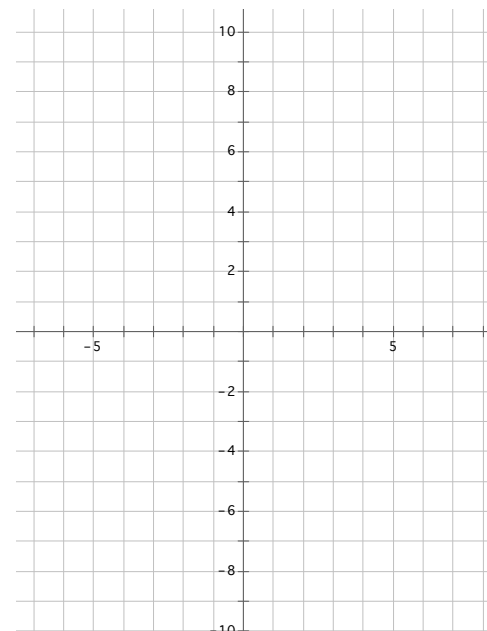

$$f(x) = -4\left(\frac{3}{2}\right)^x + 6$$

$$f(x) = -\left(\frac{5}{2}\right)^x + 5$$

$$f(x) = 12(2)^{-x} - 6$$

3.   The gross wastes generated in plastics, in millions of tons, from 1980 to 2003 can be
        approximated by the exponential function defined by

$$W(x) = 7.77(1.059)^x$$

        where x=0 corresponds to 1980. Use this function to approximate the plastic waste amounts
        for 1985, 1995 and 2000.

4.   Mrs. Nagel deposits $2000 in a savings account that is compounded monthly at 3.2% interest.
        What will the account balance be in 15 years?

5.   Mr. McCord deposits $2000 in a savings account that is compounded quarterly at 3.6%
        interest. What will the account balance be in 15 years?