Recognize and define exponential, and apply them to solve real-life problems in business and Economics:

1. If $A(x) = 400e^{0.01x}$, where x is the number of units produced. Find A if

    (i)   X= 400 units?

    (ii)   X=1000 units?

2. Graph the function $f(x) = 3^x$ on interval (-3 , 3)

3. Solve each of the following Expontional Functions:

    (i) $3^x = 81$

    (ii) $5^x = 625$

    (iii) $32^x = 8$

    (iv) $5^{3x-6} = 125$

    (v) $4^{2x-1} = 64$

    (vi) $8^{x+2} = 4^{x-3}$

    (vii) $8^{x+3} = 16^{x-1}$

    (viii)$3^{1-x} = \frac{1}{27}$

    (ix) $5^{2-x} = \frac{1}{125}$