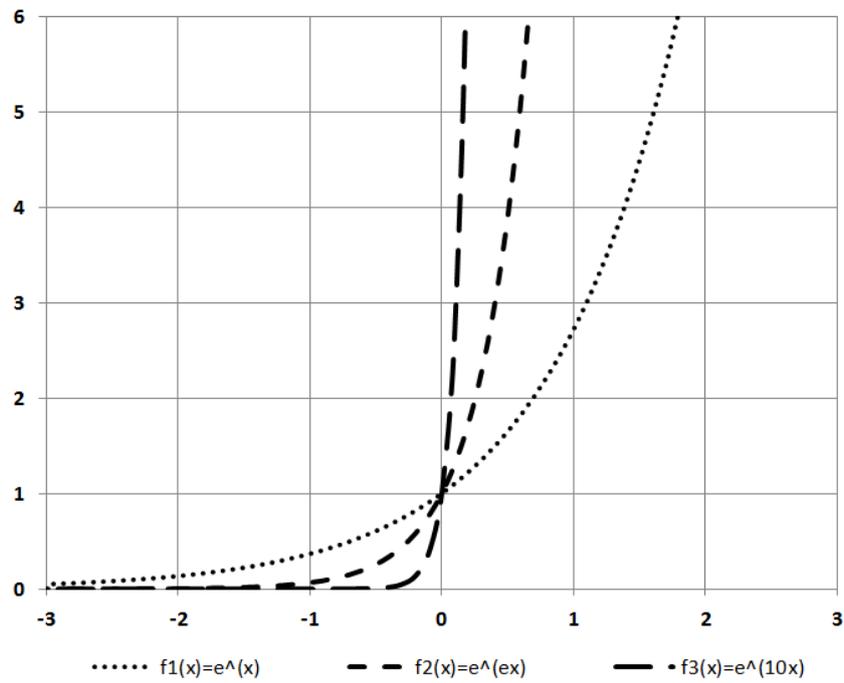
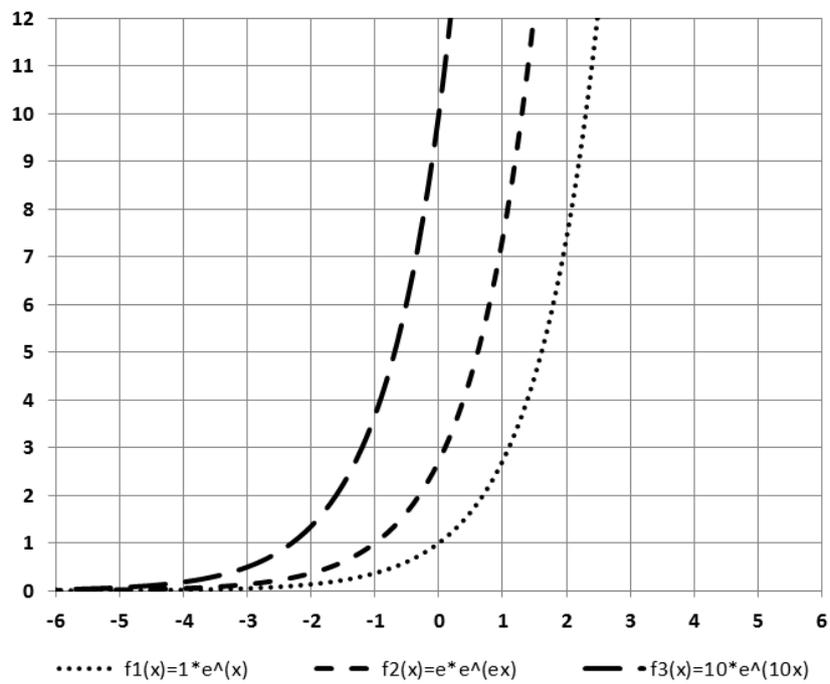


## Exponential function and logarithm

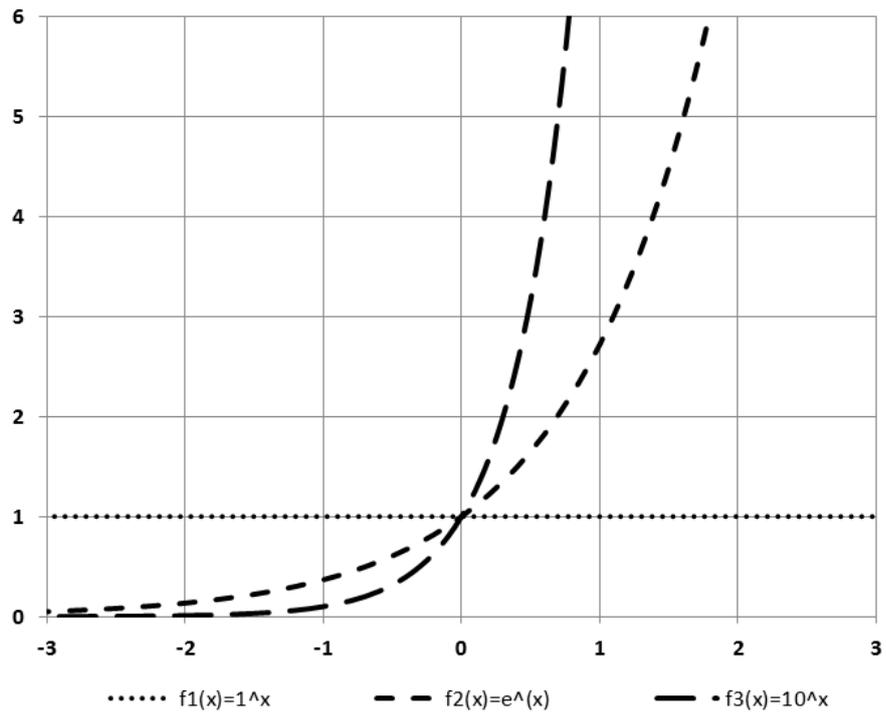
1. a)



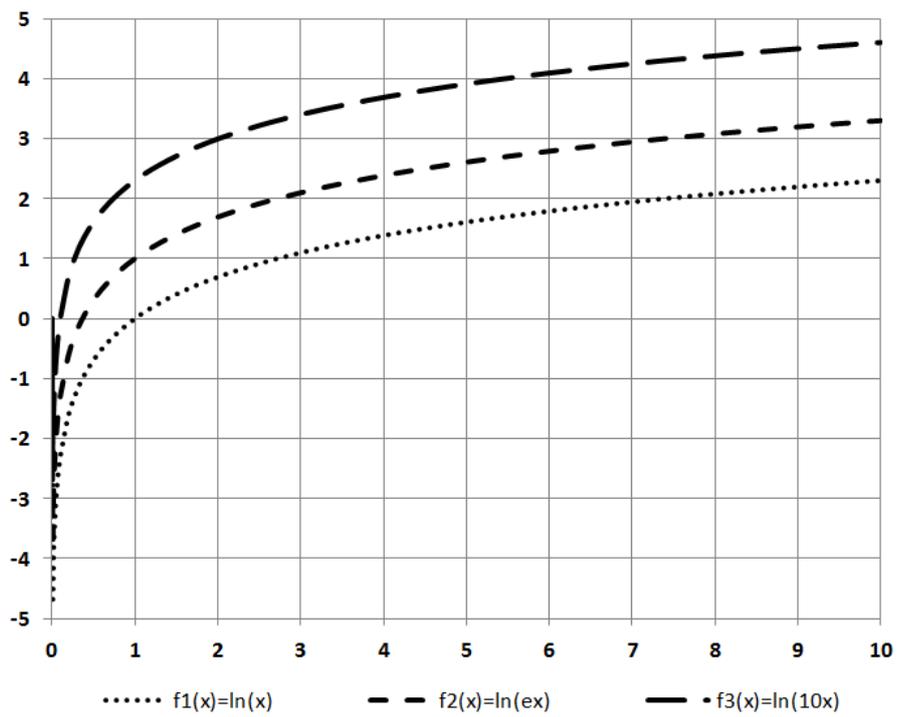
b)



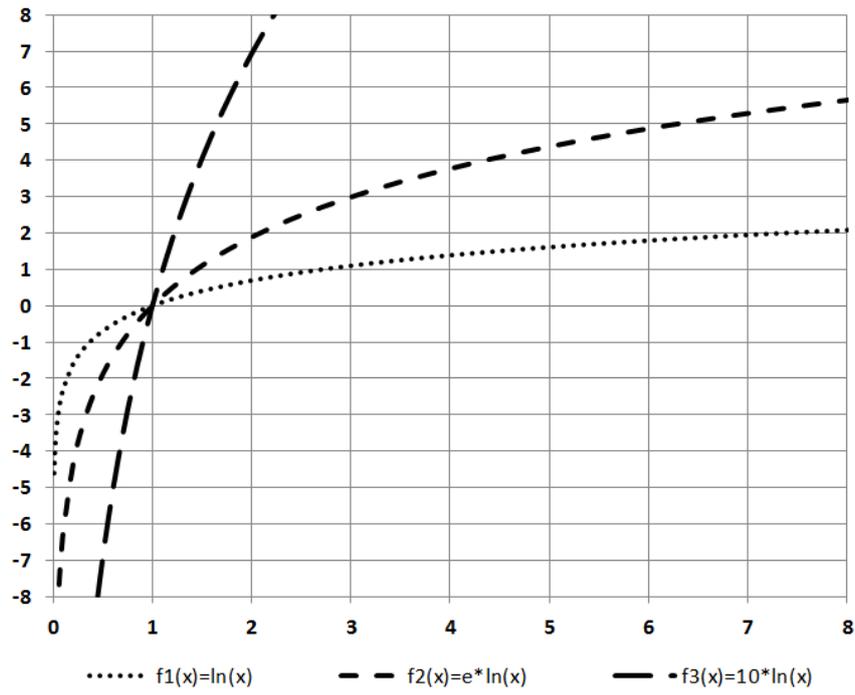
c)



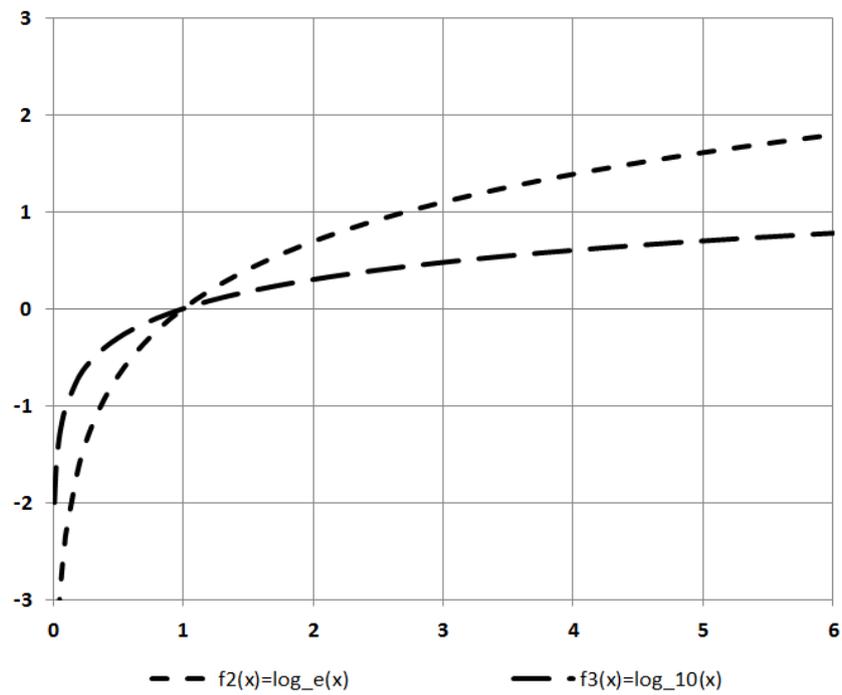
d)



e)



f)



2. a)  $x = 0$   
b)  $x = -2$   
c)  $x_1 = -1 + \sqrt{1 + \ln(2)}$ ;  $x_2 = -1 - \sqrt{1 + \ln(2)}$   
d)  $x = 3$   
e)  $x = 100$   
f)  $6 \ln(x) - 2 \ln(x) = 4 \ln(x) = 2.4 \implies \ln(x) = 0.6 \implies x = e^{0.6}$   
g)  $x = \frac{1}{e^e}$   
h)  $x_1 = 2$ ;  $x_2 = 5$