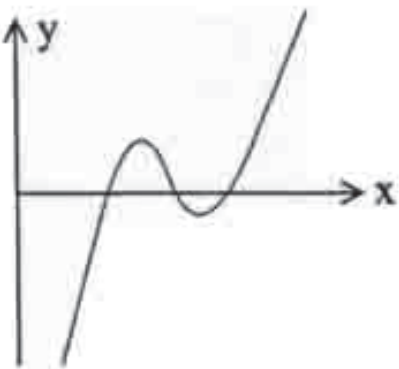


1. (8 pts.) The figures below show the graphs of four functions for positive values of x . For each of the figures, circle the function which best represents the graph in the figure. Assume that $a, b, c, k > 0$.

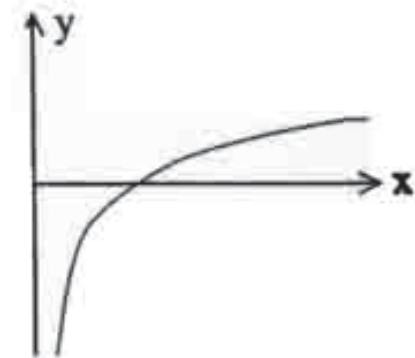


$$y = -k(x+a)(x+b)(x+c)$$

$$y = k(x+a)(x+b)(x+c)$$

$$y = k(x-a)(x-b)(x-c)$$

$$y = -k(x-a)(x-b)(x-c)$$

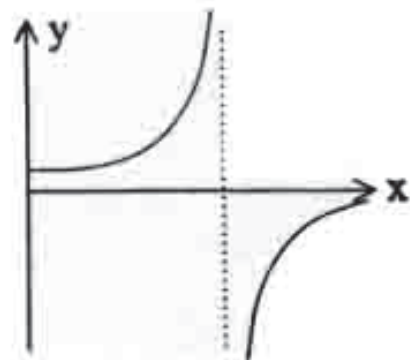


$$y = -ab^x$$

$$y = \frac{-a}{x}$$

$$y = \ln(ax)$$

$$y = \frac{-1}{e^x}$$

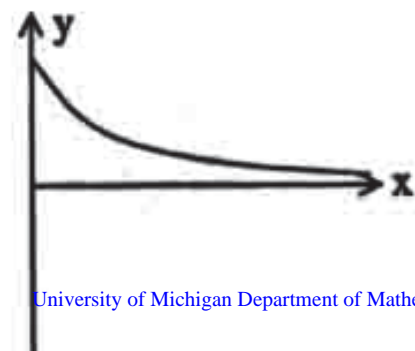


$$y = \frac{-a}{x+b}$$

$$y = \frac{a}{x-b}$$

$$y = \frac{1}{e^x}$$

$$y = \frac{-a}{x-b}$$



$$y = ab^x, \quad b > 1$$

$$y = ab^x, \quad 0 < b < 1$$

$$y = -\ln(x)$$

$$y = -e^x$$