

King Fahd University of Petroleum and Minerals
Prep-Year Program
Math 002 Quiz 1A

Name: _____ ID#: _____ Sec#: _____

1. Given $f(x) = 3^{x-1} - 3$.

(a) Graph $f(x)$

(b) Find the Domain and the Range of $f(x)$.

(c) Find the Asymptote of $f(x)$.

(d) Find the x- and y-intercept of $f(x)$.

2. Find the Domain of the function $f(x) = \log_x(1 - x^2)$.

3. Write the equation $\log_3 81 = x - 1$ in its exponential form.

4. Let $f(x) = \log_b x$ such that $f(4) = -2$, Find the value of

(a) $f(16)$

(b) $f^{-1}(4)$

5. Given $f(x) = |\ln |x||$

(a) Graph $f(x)$.

(b) Find the Domain and the Range of $f(x)$.