MATH2 (814012) –F42- SPRING 2006

QUIZ # (5) 16/5/2006

NAME:..... **I.D:**.....

Question (1): Let $f(x) = 7^x$, find the following:

- Domain =
- Range =
- x-intercept =
- y-intercept =
- $f(2) \cdot f(-2) =$
- Find $f^{-1}(x)$

Question (2):

(1) Change $\log_3 27 = 3$ to exponential form $\Rightarrow$

(2) Change $(16)^{\frac{1}{4}} = 2$ to logarithmic form $\Rightarrow$

(3) Write as a single logarithm: $\log_5(x^2 - 4) - \log_5(x - 2)$

(4) Rewrite as a sum or difference of multiples of logarithms: $\ln\left(\frac{x^2\sqrt{y}}{w^4}\right)$

(5) Evaluate: $\log_2 4 + e^{\ln 5} - \log_3 3^4 =$

(6) Solve for x : $4^{3x} = 8$ **or** $\log_3(x - 5) = 2$

Question (3): Solve the following equations

(1) $\ln(x)+\ln(x-2)=\ln(x+2)+\ln(x-3)$

(2) $2^{x}=3^{x+3}$

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Good Luck

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