MATH2 (814012) –F42- SPRING 2006

QUIZ # (4) 2/5/2006

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

Question (1): Let $f(x)=\sqrt{x-2}$ and $g(x)=x^2-2x$

1. Find $(f\circ g)(x)=$

2. Find $(g\circ f)(x)=$

3. Determine whether $f(x)$ and $g(x)$ are inverses of each other. (**Give the reason**)

4. Evaluate: $g(f(6))=$

   $(f\circ g)(3)=$

5. Find
   (a) $(f-g)(x)$ and its domain.

   (b) $\left(\frac{f}{g}\right)(x)$ and its domain.

Question (2): Find the inverse of the following functions.

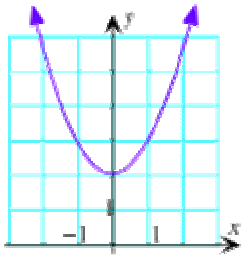
(1) $T = \{(2, 3), (4, 5), (6, 7), (8, 5)\}$

(2) $f(x) = \dfrac{x-2}{x+1}$

Question (3): Determine whether the following are **invertible functions** or not.

(***Give the reason***)

(1)



(2) $x + 1 = \sqrt{3y - 2}$

(3)

x	***Y***
2	6
4	8
6	10
8	12

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Good Luck

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