

MATH2 (814012) –F42- SPRING 2006

QUIZ # (2)

14/3/2006

NAME:.....

I.D:.....

Question (1): Let $f(x) = \frac{3}{2}x - 5$. Find the following:

(1) Domain =

(2) Range =

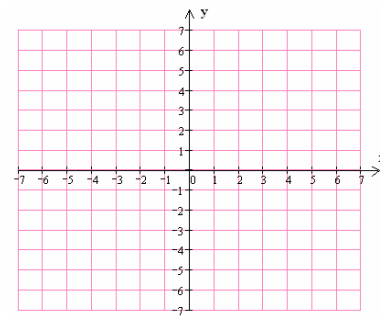
(3) Slope =

(4) y-intercept =

(5) x-intercept =

(6) Determine whether the function is increasing or decreasing =

(7) Graph $f(x)$.



Question (2): Find the domain and the range of the following functions:

(1) $f(x) = \frac{3x + 2}{3x^2 + 5x}$

(2) $g(x) = -2\sqrt{3x + 2} + 4$

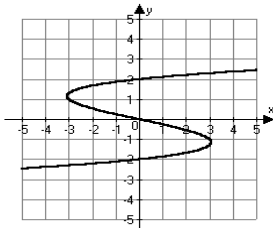
(3) $f(x) = |2x - 1| - 3$

Question (3): Determine whether the following are functions or not (Give the reason):

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

(2) $3 + x = |y|$

(3)



Question (4): Let $f(x) = \sqrt{3x+3}$, $g(x) = |2x-1|$ and $h(x) = \begin{cases} 4x-2 & \text{if } x \geq 3 \\ x^2+1 & \text{if } x < 3 \end{cases}$

Evaluate the following:

(1) $\frac{3f(2) - 2g(1)}{2h(3)}$

(2) $5f(-2) + h(0)$

Good Luck

Mahmoud Syam