QUIZ 2 - MTH 163 - 10 points

Name:_____Date:__

Instructions: Solve the following. Remember to show all work in order to receive full credit.

1. Use a graphing utility to sketch the complete graph of $y = .5x^2 - 60$. Show the window values you used to obtain the graph. Graph $y = .5x^2 - 60$.

    x min. =

    x max. =

    y min. =

    y max. =

2. Find the equation of a line given
   a)   points (-1,4) and (6,4)
   b)   point (-10,4) and slope is 2

3. Given $g(x) = \frac{1}{x-4}$
   a)   Find $g(2)$
   b)   Find the domain of g

4. Determine if the function is even, odd, or neither. Verify your answer algebraically.
$$g(x) = x^3 - 2x$$

5. Given: $f(x) = \frac{1}{x^3}$ and $g(x) = x^2$
   a) Find $f \circ g$
   b) Find $g \circ f$

6. Determine if f(x) = $\frac{3x+4}{5}$ is one-to-one. Show the reason for your answer.

7. Find the inverse of $f(x) = 3x + 7$.
Verify f and f^{-1} are inverses algebraically.

- REMEMBER after QUIZ # 2 there will be an exam in

the TESTING CENTER
- EXAM # 1 will include concepts from Quizzes # 1 and # 2