**Gonzaga 2014 Math 3200 - Chapter 1: Function Transformations**

**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

***Part A: Multiple Choice (15 marks)***

1. If the mapping rule is applied to , what is the transformed equation?

A.

B.

C.

D.

2. What is the mapping rule that is applied to to obtain

?

A.

B.

C.

D.

3. If the point lies on the graph of , which point lies on the graph of ?

A.

B.

C.

D.

\_\_\_\_\_4. If is replaced by 3y in the equation , the graph of will be stretched

A) horizontally by a factor

B) vertically by a factor of 3

C) horizontally by a factor of 3

D) vertically by a factor of



\_\_\_\_\_5. Given , which graph represents ?

A)

\_\_\_\_\_6. What is the inverse equation of ?

A)

B)

C)

D)

\_\_\_\_\_7. Which of the following transformations to the graph of would have the y-intercepts as invariant points?

A) B)

C) D)

\_\_\_\_\_12. The function is transformed to . If the original domain is

, what is the domain of the transformed function? What would the range of the inverse function of the transformation be? LEVEL 3 QUESTION

A) B)

C) D)

13. What is the domain of the inverse function ?

A)

B)

C)

D)

Short Answer Question LEVEL 3 - one like it on public!

19. Sketch the graph of after has undergone a vertical stretch of 2, reflection in the x-axis, and horizontally 5 left.

give graph of f(X)