**Extra practice for Chapter 1 TEST**

**1.** Determine the equation in standard form (expanded) of the parabola obtained by stretching horizontally by a factor 3, and translating it 1 unit to the right and 5 units up.

**2.** If (3,-8) is on the graph of , which corresponding point is on the graph of   
? Us the table below to list the transformations and the corresponding coordinates.

|  |  |
| --- | --- |
| Transformation | Starting point (3,-8) |
|  |  |
|  |  |
|  |  |
|  |  |
|  | Corresponding point |

**3.** Determine the inverse of .

**4.** a)What is the equation of the function that you get after reflecting around the *y*-axis and stretching it vertically by a factor 3.

b) Same question with

**5.** a)What is the equation of the function that you get after reflecting around the *x*-axis and stretching it horizontally by a factor .

b) Same question with

b) Same question with

**6.** Let

**a)** Determine its domain and range.

**b)** How do you know that the inverse won’t be a function?   
  
  
c) restrict the domain so that the inverse is a function.   
  
d) What are the domain and the range of the inverse?