AFM Unit 1 Review Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Write an equation for the piecewise function.

2). For the following function *g*, decide if each of the statements is correct. If it is incorrect, fix the equation or restriction to make it true.

|  |  |  |
| --- | --- | --- |
| Check one: | Statement | Correction to the Statement (if *false*) |
| True | False |
|  |  | From A to B, the restriction is -2< x < 4. |  |
|  |  | From B to C, the equation is *g(x) =*  |  |
|  |  | From C to D, the equation is *g(x) =* 7. |  |
|  |  | To the right of E, the equation is *g(x)* =  |  |
|  |  | To the right of E, the restriction is *x* > 8.  |  |

Use the given function to evaluate each expression.

3.  a. *f* (-1) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 b. *f* (5) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. For the function find the following:

a) Translations : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ b) Saddle Point: \_\_\_\_\_\_\_

c) Domain: \_\_\_\_\_\_\_\_\_\_\_\_ d) Range: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

e) Inc. Interval \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ f) Dec Interval: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5.

a) Translations : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ b) Vertex: \_\_\_\_\_\_\_

c) Domain: \_\_\_\_\_\_\_\_\_\_\_\_ d) Range: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

e) Inc. Interval \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ f) Dec Interval: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. For the function find the following:

a) Translations : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ b) Asymptote: \_\_\_\_\_\_\_

c) Domain: \_\_\_\_\_\_\_\_\_\_\_\_ d) Range: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

e) Inc. Interval \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ f) Dec Interval: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_