Name: Period: Due Date: May 6, 2019

(MATH 4/5)

**Exponentials & Logarithms Homework #11**

Directions: Graph the transformation and describe each of the transformations.

|  |  |
| --- | --- |
| Domain |  |
| Range |  |
| Asymptote |  |
| X-Intercept |  |
| Y-Intercept |  |
| End Behavior |  |
| Interval of Increase/Decrease |  |

1. g(x)= - ½ f(x)+1



f(x) was \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to obtain g(x).

Directions: Graph the logarithmic function and find the key characteristics. (You can count the lines by whatever you would like; example 5, 10, 15, 20, etc.)

1. f(x)=log5x



|  |  |
| --- | --- |
| Domain |  |
| Range |  |
| Asymptote |  |
| X-Intercept |  |
| Y-Intercept |  |
| End Behavior |  |
| Interval of Increase/Decrease |  |

Directions: Solve for x.

1. log2x=5
2. logx81=2
3. log327=x
4. log5x=3

Directions: Graph the transformation and describe each of the transformations.

1. n(x)=m(-x+1)-2

|  |  |
| --- | --- |
| Domain |  |
| Range |  |
| Asymptote |  |
| X-Intercept |  |
| Y-Intercept |  |
| End Behavior |  |
| Interval of Increase/Decrease |  |



m(x) was \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to obtain n(x).

Directions: Solve for x.

1. log7(343)=x
2. log ¼ (64)=x