Name:
#:

/34

HOMEWORK 7.4

Secondary Math II

Turned in On Time (4 pts.) ☐

0A.(2 pt.) For the function $f(x) = x^2 + 4$ find $5f(f(2))$

0B.(2 pt.) For the function $g(x) = -2x$ and $h(x) = -x^2 + 4x$, find $(g + h)(6)$.

Review

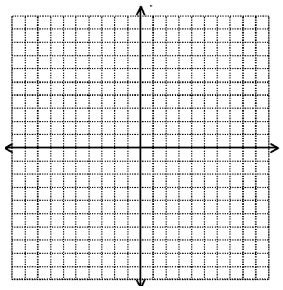
1.(2 pt.) Write $\sqrt[3]{108}$ in simplest exact value form

2. (2 pt.) Write $\sqrt{-50}$ in simplest exact value form

3. (2 pt.) Write $\sqrt{-121}$ in simplest exact value form

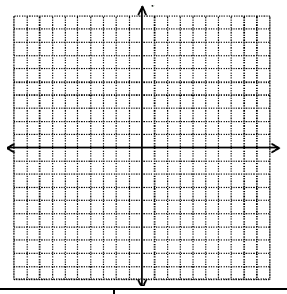
Classroom Exercise #4

(3 pts.) ☐



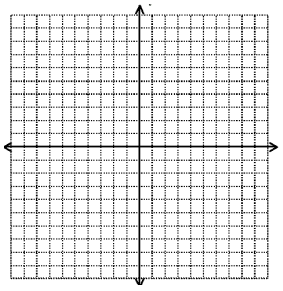
4A. (1 pt.) Graph the function that has the following (label key points)

1. Parent function is exponential
2. Horizontal stretch by a factor of 3
3. Vertical shift up 2 units



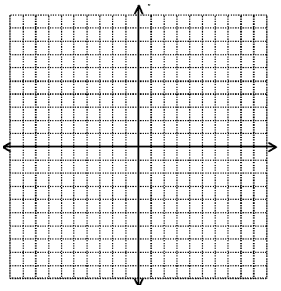
4B. (1 pt.) Graph the function that has the following following (label key points)

1. Parent function is absolute value
2. Horizontal stretch by a factor of 4
3. Vertical shift down 1 unit



4C. (1 pt.) Graph the function that has the following following (label key points)

1. Parent function is cubic
2. Horizontal stretch by a factor of 2
3. Vertical shift up 1 unit



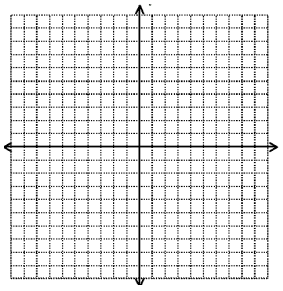
5. (2 pt.) Identify the parent function and list the transformations that have occurred to the parent function.
$k(s) = (3s)^2 + 4$

6. (2 pt.) Identify the parent function and list the transformations that have occurred to the parent function.
$k(s) = -4\sqrt{(0.2s)}$

7. (2 pt.) Identify the parent function and list the transformations that have occurred to the parent function.
$t(s) = 7|s + 5|$

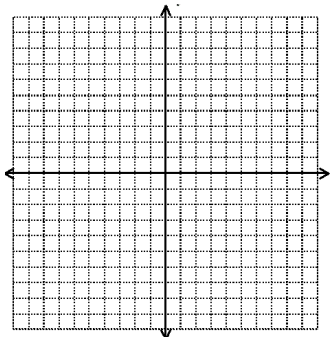
Classroom Exercise #8

(3 pts.)



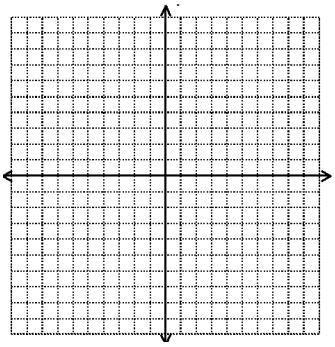
8A. (1pt.) Graph the function that has the following (label key points)

1. Parent function is absolute value
2. Horizontal shift left 2 units
3. Vertical stretch by a factor of 4



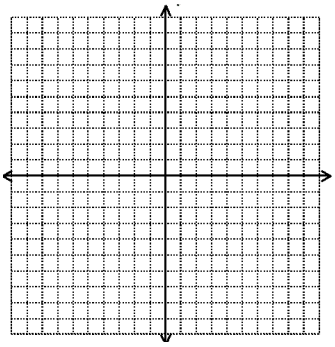
8B. (1pt.) Graph the function that has the following (label key points)

1. Parent function is linear
2. Horizontal shift right 3 units
3. Vertical stretch by a factor of 3



8C. (1pt.) Graph the function that has the following (label key points)

1. Parent function is radical
2. Horizontal shift left 1 unit
3. Vertical stretch by a factor of 2



9. (1 pt.) Write a function that has the following requirements
1. cubic parent function
2. horizontal shift left 7 units
3. vertical shift up 3 units

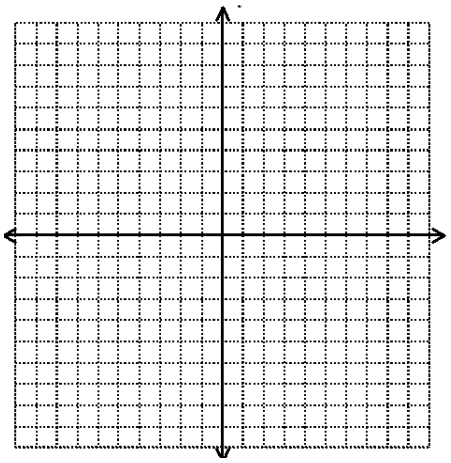
10. (1 pt.) write a function that has the following requirements
1. exponential parent function (base is 2)
2. horizontal stretch by a factor of 3
3. reflection about the x-axis

11. (1 pt.) write a function that has the following requirements
1. radical parent function
2. horizontal shift left 4 units
3. Vertical stretch by a factor of 2

12. (3 pt.)
Given the parent function $f(x) = |x|$,

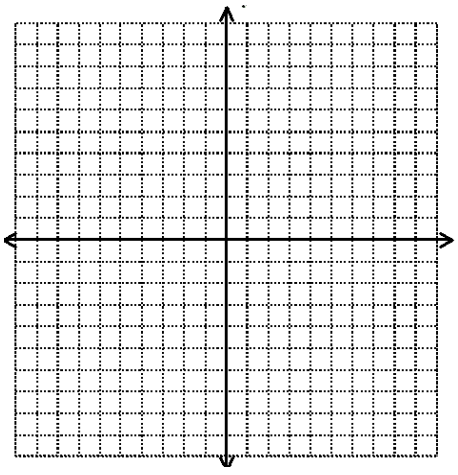
1. Graph (label key points)
2. write as a function
3. List the transformations

that occurred for $2f(x + 3)$

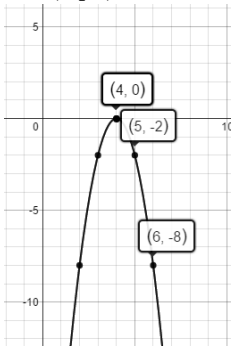


13. (3 pt.) for the function that has a reflection about the x-axis, horizontal shift left 3 units and whose parent function is cubic

1. Graph (label key points)
2. write as a function
3. If the parent function is $f(x) = (x)^3$, write in terms of "k" and f(x)



14. (3 pt.) For the following graph,



1. identify the parent function
2. write the function that represents this graph
3. List the transformations that have occurred.