**PAP Algebra 2** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
**3.2-3.4 Practice WS**

**Given  complete the table and graph *h*(*x*).**

 1.  2. 

|  |  |  |
| --- | --- | --- |
| **Reference Points of *f*(*x*)** |  | **Corresponding Points on *h*(*x*)** |
| (0, 0) |  |  |
| (1, 1) |  |  |
| (2, 4) |  |  |

|  |  |  |
| --- | --- | --- |
| **Reference Points of *f*(*x*)** |  | **Corresponding Points on *h*(*x*)** |
| (0, 0) |  |  |
| (1, 1) |  |  |
| (2, 4) |  |  |

 

**Each given function is in transformational function form  where  Identify the values of *C* and *D* for the given function. Then, describe how the vertex of the given function compares to the vertex of *f*(*x*).**

 3.  4. 

**Graph each vertical dilation of  accurately, and tell whether the transformation is a vertical stretch or a vertical compression and if the graph includes a reflection.**

 5.  6. 

  

 7.  8. 

  

**Each given function is in transformational function form  where  Describe how *g*(*x*) compares to *f*(*x*). Then, use coordinate notation to represent how the *A*-, *C*-, and *D*-values transform *f*(*x*) to generate *g*(*x*).**

 9.  10. 

11.

 11.  12. 

**Write the transformations that occurred from** $f\left(x\right)=x^{2}$ **to the given graphs belowin function notation.**

13. a = 2 14. a = 1

 

**Write a function** $g(x)$ **that has been transformed from** $f\left(x\right)=x^{2}$ **in function notation using the characteristics below.**

15. Vertically compressed 16. Horizontally reflected

17. Horizontally stretched 18. Vertically stretched

19. Vertically reflected 20. Horizontally compressed

**The graph of *f*(*x*) is shown. Sketch the graph of the given transformed function.**

 21. $t\left(x\right)=-f(x-4)$ 22. $r\left(x\right)=f\left(\frac{1}{2}\left(x+2\right)\right)+2$

  

 23. $d\left(x\right)=f(-x)$

