

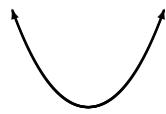
Function Family Transformation WS

Name: _____

Don't use the calculator. Identify the family of functions with the graph.

1. Square

Use the following to answer 1-20



2. Square root

(a)



3. Absolute Value

(b)



4. Linear

(c)



5. Greatest Integer

(d)



6. Reciprocal

(e)

7. Cube

(f)



9. $f(x) = \sqrt{x}$

10. $f(x) = -x^2$

11. $f(x) = \sqrt{-x}$

12. $f(x) = x^2$

13. $f(x) = -2|x|$

14. $f(x) = \llbracket x \rrbracket$

15. $f(x) = \sqrt[3]{x}$

16. $f(x) = -x^3$

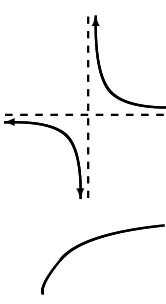
17. $f(x) = x$

(g)



18. $f(x) = \frac{1}{x}$

(h)



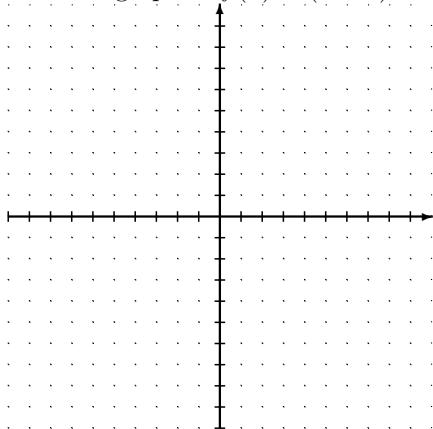
19. $f(x) = 4$

(i)

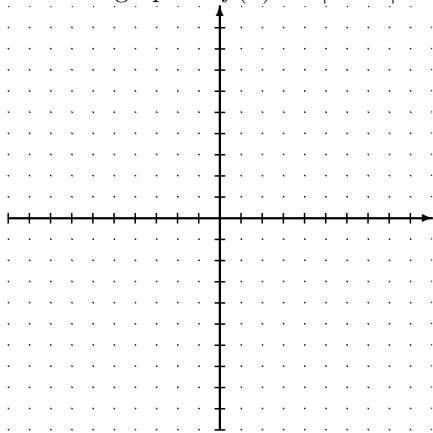
20. $f(x) = x^2 + 10x + 25$

(j) None of these

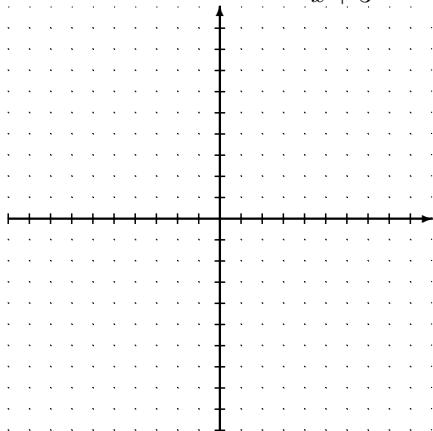
21. Sketch a graph of $f(x) = (x - 3)^2 + 4$



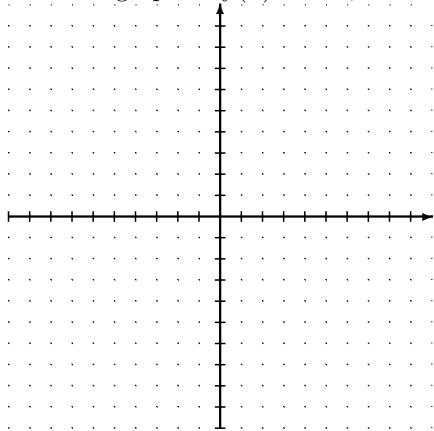
22. Sketch a graph of $f(x) = 2|x - 1| - 3$



23. Sketch a graph of $f(x) = \frac{1}{x + 3} - 2$



24. Sketch a graph of $f(x) = -2\sqrt{x + 1}$



25. Sketch a graph of $f(x) = \llbracket x - 2 \rrbracket + 3$

