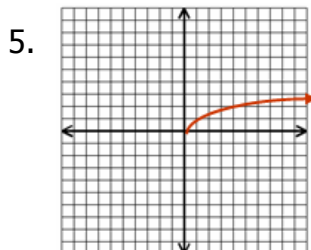
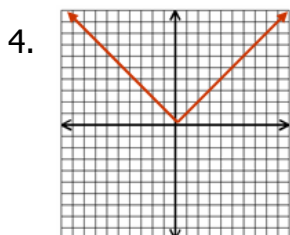
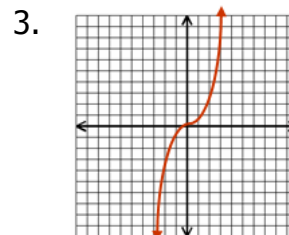
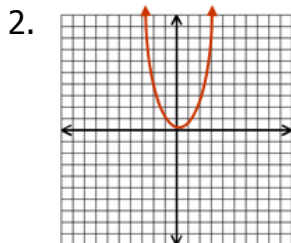
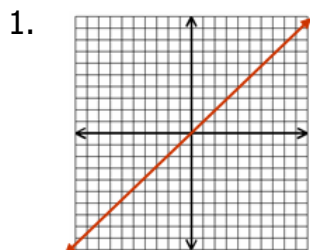


Transformations – Pulling it all together

Name: _____ Period: _____

Match the name & equation to the graph.

Names:	A) absolute value	B) cubic	C) linear	D) quadratic	E) radical
Equations:	F) $y = x$	G) $y = x^2$	H) $y = x^3$	I) $y = x $	J) $y = \sqrt{x}$



Standard form of a transformation $g(x) = af(x - h) + k$

Quadratic
 $y = a(x - h)^2 + k$

Examples
Cubic
 $y = a(x - h)^3 + k$

Exponential
 $y = a2^{x-h} + k$

- _____ 6) describe the effect of **a** on the graph.
- _____ 7) describe the effect of **h** on the graph.
- _____ 8) describe the effect of **k** on the graph.

Transformations – Pulling it all together

Identify the parent function name and describe the transformation for each function.

9. $g(x) = -3(x-1)^2 - 6$ Name _____

Transformations _____

10. $f(x) = 5(x-2)^3 - 11$ Name _____

Transformations _____

11. $h(x) = \frac{2}{3}|x+6|$ Name _____

Transformations _____

12. $f(x) = x + 6$ Name _____

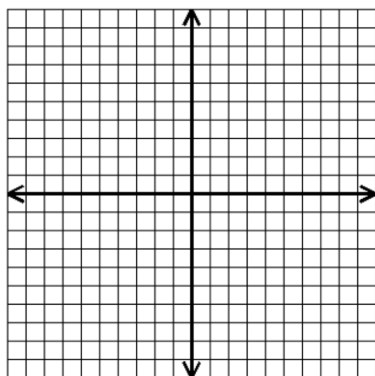
Transformations _____

13. What is the effect on the graph of the function $y = x^2 + 2$ when it is changed to $y = x^2 - 3$?

Name the Parent Function. List the transformations. Graph each equation.

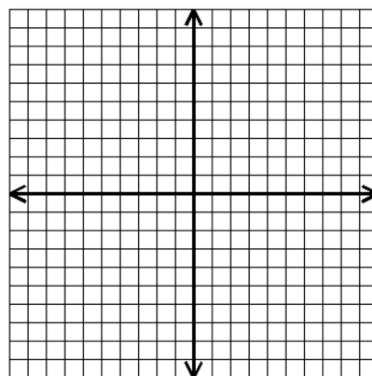
14. $y = (x + 2)^2 - 3$

15. $y = -2|x - 3| + 2$



Parent Function:

Transformations:

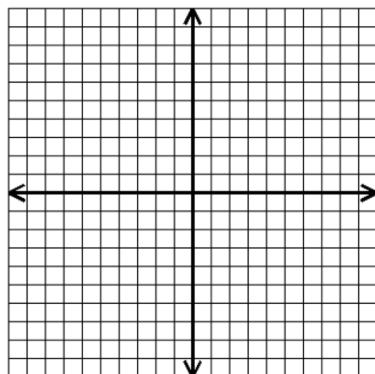


Parent Function:

Transformations:

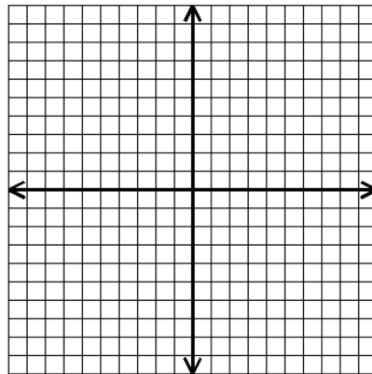
16. $y = 4x + 5$

17. $y = \sqrt{x+5}$



Parent Function:

Transformations:



Parent Function:

Transformations: