

#12 Naming Parent Functions Worksheet

Give the name of the parent function and describe the transformation represented.

1. $g(x) = x^2 - 1$ Name: _____

Transformation: _____

2. $f(x) = 2|x-1|$ Name: _____

Transformation: _____

3. $h(x) = \sqrt{x-2}$ Name: _____

Transformation: _____

4. $g(x) = x^3 + 3$ Name: _____

Transformation: _____

5. $f(x) = |x + 5| - 2$ Name: _____

Transformation: _____

Identify the domain and range of the function. Describe the transformation from its parent function.

6. $g(x) = 3\sqrt{x}$ Domain : _____ Range : _____

Transformation: _____

7. $h(x) = -x^2 + 1$ Domain : _____ Range : _____

Transformation: _____

8. $h(x) = -|x - 2|$ Domain : _____ Range : _____

Transformation: _____

9. $f(x) = \frac{3}{4}\sqrt{x}$ Domain : _____ Range : _____

Transformation: _____

10. $h(x) = 6(x + 9)^2$ Domain : _____ Range : _____

Transformation: _____

Given the parent function and a description of the transformation, write the equation of the transformed function, $f(x)$.

11. Absolute value—vertical shift up 5, horizontal shift right 3. _____

12. Radical—vertical compression by $\frac{2}{5}$ _____

13. Cubic—reflected over the x axis and vertical shift down 2 _____

14. Quadratic—vertical compression by .45, horizontal shift left 8. _____