

Here are the names of six parent functions:

Linear

Cubic

Reciprocal

Quadratic

Absolute value

Radical

1- 7 Give the name of the parent function and describe the Transformation(s) represented.

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

5. $g(x) = \frac{1}{x+6}$ Name:
Transformation(s):

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

6. $f(x) = |x+5| - 2$ Name:
Transformation(s):

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

7. $h(x) = \frac{1}{x} - 5$ Name:
Transformation(s):

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

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Identify the domain and range of the function. Describe the Transformation(s) from its parent function.

8. $g(x) = 3\sqrt{x}$ Domain : Range : Transformation(s):

9. $h(x) = -x^2 + 1$ Domain : Range : Transformation(s):

10. $h(x) = -|x - 2|$ Domain : Range : Transformation(s):

11. $f(x) = \frac{3}{4}\sqrt{x}$ Domain : Range : Transformation(s):

12. $h(x) = 6(x + 9)^2$ Domain : Range : Transformation(s):

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

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

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

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

16. Reciprocal—vertical stretch by 8

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

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