

For problems 5 - 16 given the parent function and a description of the transformation, write the equation of the transformed function, $f(x)$.

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

6. Linear—vertical shift up 5. _____

7. Square Root —vertical shift down 2, horizontal shift left 7. _____

8. Quadratic— horizontal shift left 8. _____

9. $f(x) = |x + 5| - 2$ Parent:
Transformation:

10. $g(x) = x^2 - 6$ Parent:
Transformation:

11. $f(x) = |x - 1|$ Parent:
Transformation:

12. $h(x) = \sqrt{x} + 4$ Parent:
Transformation:

13. $g(x) = 2x - 2$ Parent:
Transformation:

14. $g(x) = -(x+1)^2 + 3$ Parent:
Transformation:

15. $h(x) = -x^2 + 1$ Parent:
Transformation:

16. $h(x) = \sqrt{x+2} - 5$ Parent:
Transformation: