

4. $f(x) = -(x - 2)^3 + 1$

Parent Function: Increasing: x-intercept(s):

Transformations: Decreasing: y-intercept:

Domain: Left End Behavior: Maximum:

Range: Right End Behavior: Minimum:

5. $f(x) = 2\sqrt[3]{x} + 1$

Parent Function: Increasing: x-intercept(s):

Transformations: Decreasing: y-intercept:

Domain: Left End Behavior: Maximum:

Range: Right End Behavior: Minimum:

6. $f(x) = 2^{x-3} + 1$

Parent Function: Increasing: x-intercept(s):

Transformations: Decreasing: y-intercept:

Domain: Left End Behavior: Maximum:

Range: Right End Behavior: Minimum:

Factor Completely

7. $r^2 + 10r$

8. $p^2 - 10p + 21$

9. $3n^4 + 16n^3 + 5n^2$

10. $5x^2 - 13x - 28$

11. $-6p^2 - 31p - 5$

12. $20p^3 + 40p^2 - 105p$