Linear
Point-slope equation:
$y = a(x - h) + k$
(h,k): a point
negative a:
Parent Equation: $y = x$

Radical
General Equation:
$y = a\sqrt{x - h} + k$
(h,k): endpoint
negative a:
Parent Equation: $y = \sqrt{x}$

Cubic
General Equation:
$y = a(x - h)^3 + k$
(h,k): inflection point / flat spot
negative a:
Parent Equation: $y = x^3$

Cube root
General Equation:
$y = a\sqrt[3]{x - h} + k$
(h,k): inflection point / vertical spot
negative a:
Parent Equation: $y = \sqrt[3]{x}$

Absolute Value
General equation:
$y = a|x - h| + k$
(h,k):
Negative a:
Parent Equation: $y = |x|$