2-2 Transformations

Objectives:

2-2a: I can identify transformations from an equation and from a graph.

2-2b: I can identify attributes of transformed functions.

$$y = a(x-h)+k$$

Information to remember about transformations....

x's lie

any change to the domain (x's) is opposite of what appears in the equation

State the parent function and the transformations.

$$f(x) = \sqrt{x} - 2 \qquad f(x) = (x+3)^3$$

$\sqrt{x}$

slide
down 2

x^3

slide
left 3

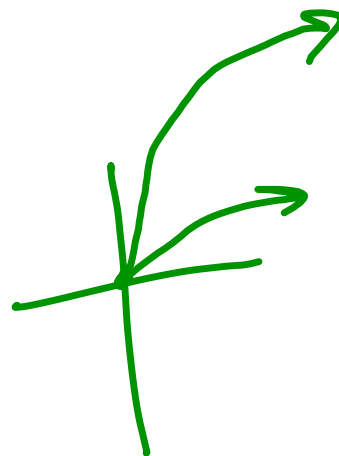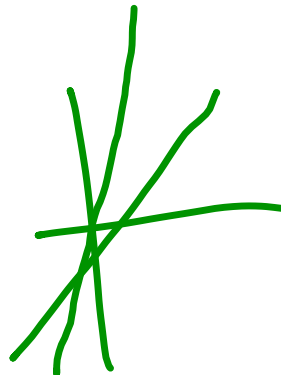State the parent function and the transformations.
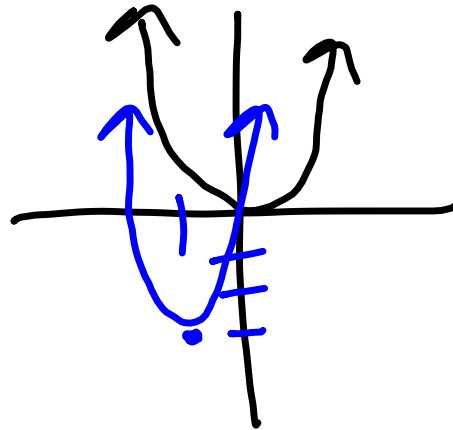
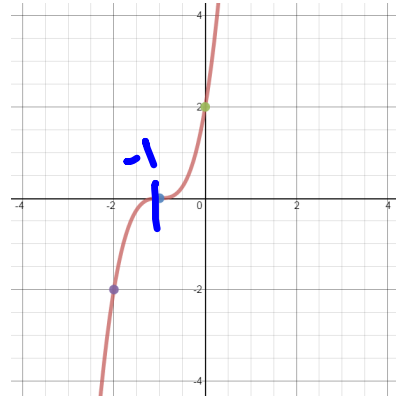$$f(x) = 2|x|$$

$$f(x) = -2^x + 5$$
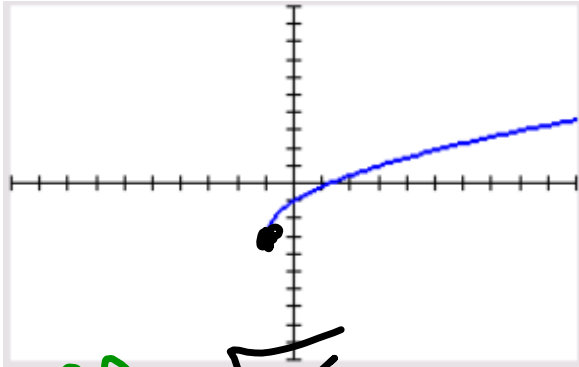
$$f(x) = 2(x+1)^2 - 3$$

p.f.: x^2

T: down 3
left 1
steeper

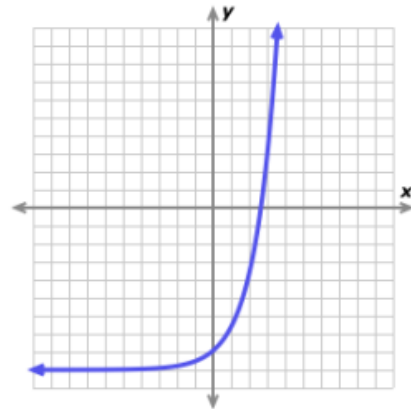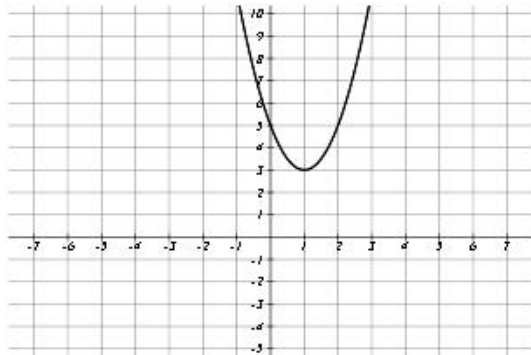State the parent function and the transformations.
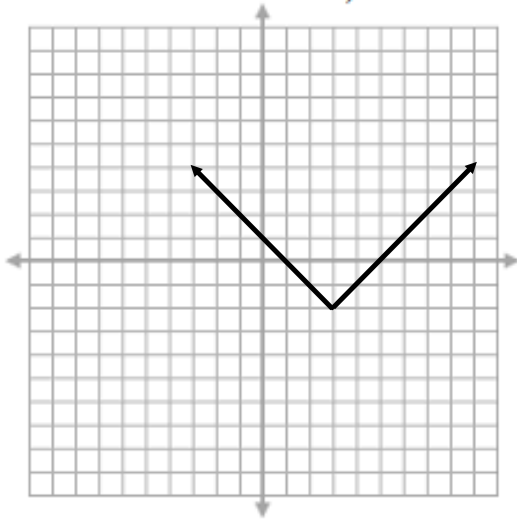
Pf: $\sqrt{x}$

T: down 3, left 1

$f(x) = \sqrt{(x+1)} - 3$

State the parent function and identify the transformations and graph

State the parent function, transformations, and attributes of the graph.

Parent Function:

Transformations:

Domain:

Range:

Increasing:

Decreasing:

Left End Behavior:

Right End Behavior:

x-intercepts:

y-intercepts: