7.1

Domains

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

$x - 3 \geq 0$

$x \geq 3$

$f(x) = \frac{3}{x-7}$ $\quad x - 7 \neq 0$

D: $\mathbb{R}$ except 7

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

$3x - 2 \geq 0$

$3x \geq 2$

$x \geq \frac{2}{3}$

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

$3x + 2 \geq 0$

$3x \geq -2$

$x \geq -\frac{2}{3}$

$y = a\sqrt{x-h} + k$

$y = \sqrt{x-3} + 1$

shape

h, k (3, 1)

a = 1 up

neutral

+x right

x	y
2	0
3	1
4	2
7	3

D: $[3, \infty)$

R $[1, \infty)$