

7.1

Domains

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

$$x-7 \neq 0$$

$$f(x) = \sqrt{x-3}$$
$$x-3 \geq 0$$
$$x \geq 3$$

$$D: \mathbb{R} \text{ except } 7$$

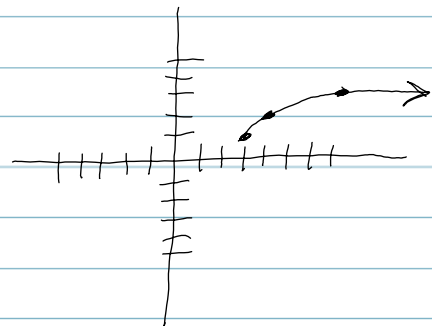
$$f(x) = \sqrt{3x-2}$$
$$3x-2 \geq 0$$
$$3x \geq 2$$
$$x \geq \frac{2}{3}$$

$$f(x) = \sqrt{3x+2}$$
$$3x+2 \geq 0$$
$$3x \geq -2$$
$$x \geq -\frac{2}{3}$$

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

Shape  $\rightarrow$   
 $h, k$   $(3, 1)$   
 $a=1$  up  
neutral  
 $+x$  right

x	y
2	1
3	1
4	2
7	3



$$D: [3, \infty)$$
$$R: [1, \infty)$$