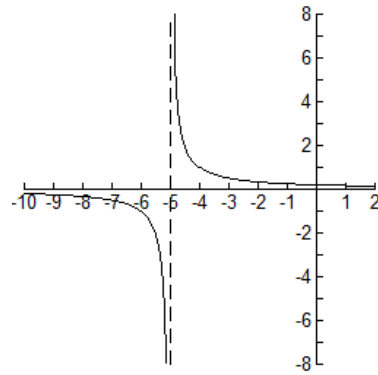


$$1. y = \frac{1}{(5+x)}$$

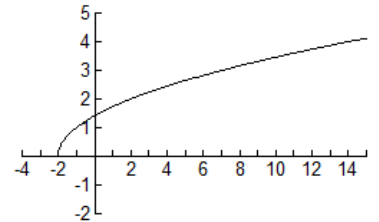
Domain: $x \neq -5$
 All reals but -5
 $(-\infty, -5) \cup (-5, \infty)$
 $x < -5$ or $x > -5$

Range: $y \neq 0$
 All reals but 0
 $(-\infty, 0) \cup (0, \infty)$
 $y < 0$ or $y > 0$



$$2. y = \sqrt{x+2}$$

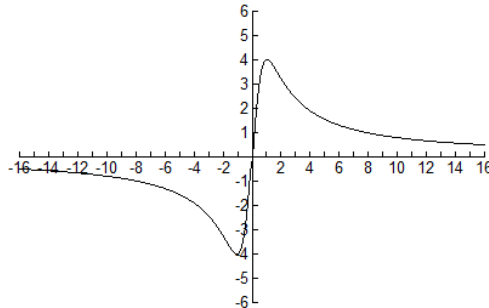
Domain: $x \geq -2$
 $[-2, \infty)$
 Range: $y \geq 0$
 $[0, \infty)$



$$3. y = \frac{8x}{1+x^2}$$

Domain: \mathbb{R}
 All reals
 $(-\infty, \infty)$

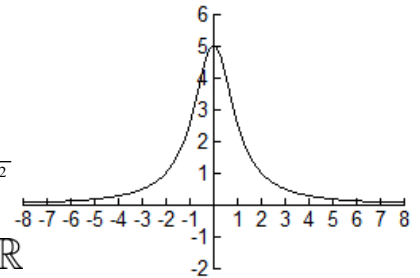
Range: $-4 \leq y \leq 4$
 $[-4, 4]$



$$4. y = \frac{5}{1+x^2}$$

Domain: \mathbb{R}
 All reals
 $(-\infty, \infty)$

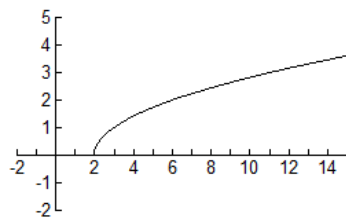
Range: $0 < y \leq 5$
 $(0, 5]$



$$5. y = \sqrt{x-2}$$

Domain: $x \geq 2$
 $[2, \infty)$

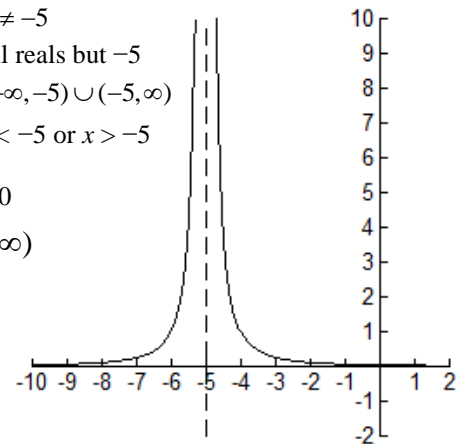
Range: $y \geq 0$
 $[0, \infty)$



$$6. y = \frac{1}{(5+x)^2}$$

Domain: $x \neq -5$
 All reals but -5
 $(-\infty, -5) \cup (-5, \infty)$
 $x < -5$ or $x > -5$

Range: $y > 0$
 $(0, \infty)$



$$7. y = \sqrt{2-x} \text{ (Sketch your own graph.)}$$

Domain: $x \leq 2$
 $(-\infty, 2]$

Range: $y \geq 0$
 $[0, \infty)$

