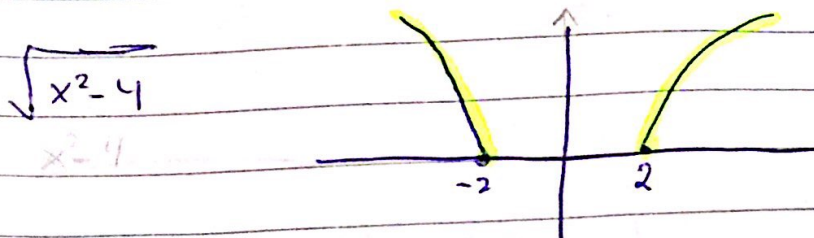


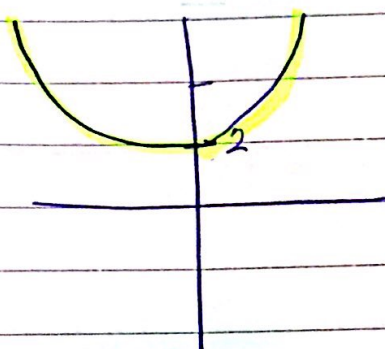
Domain \mathcal{D} Range \mathcal{R}

(i) $\sqrt{x^2 - a^2}$ $[-\infty, -a] \cup [a, \infty]$ $[0, \infty)$



(ii) $\sqrt{x^2 + a^2} \Rightarrow \mathcal{D}_f = \mathbb{R}$

Range = $[a, \infty)$

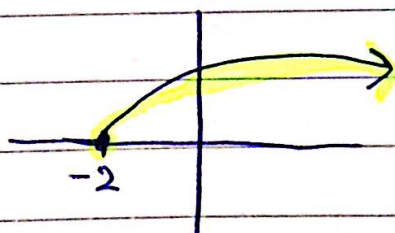


$\sqrt{x^2 + 4}$

(iii) $\sqrt{x + a}$

$\mathcal{D}_f = [-a, \infty)$

Range = $[0, \infty)$

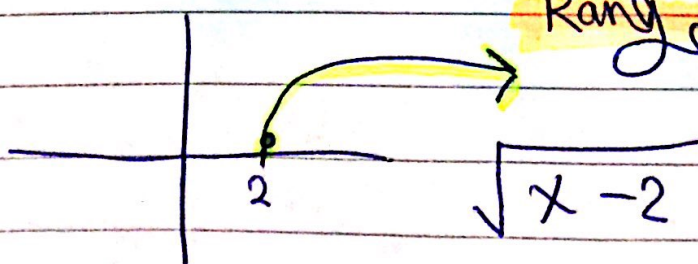


$\sqrt{x + 2}$

(iv) $\sqrt{x - a}$

$\mathcal{D}_f = [a, \infty)$

Range = $[0, \infty)$

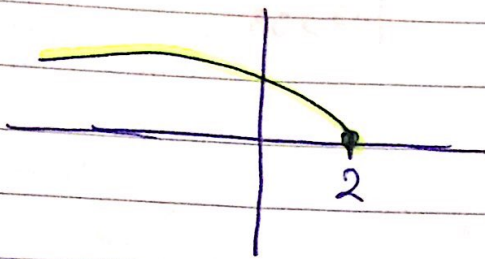


ii.

$$\sqrt{a-x}$$

$$D_f = (-\infty, a]$$

$$\text{Range } [0, \infty)$$



$$\sqrt{2-x}$$

$$* \sqrt{a^2 - x^2}$$

$$\text{Domain: } [-a, a]$$

$$\text{Range } [0, a]$$

