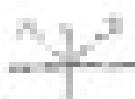


RIGHT Translation (R)



Right Translation

Given, $f(x) = x^2$ find $f(x+a)$

(i) Function's Graph

$$f(x) = x^2 \quad (-\infty, 0) \rightarrow \mathbb{R}$$

No restriction over the domain

$$\therefore f(x) = x^2 \quad (-\infty, 0) \rightarrow \mathbb{R}$$

Given, $a > 0$ find $f(x+a)$

$$f(x+a) = (x+a)^2$$

(ii) Function's expression

$$f(x+a) = \sqrt{a}(\sqrt{x+a})$$

Given, $f(x) = x^2$ find $f(x-a)$

(i) Function's Graph

$$f(x) = \sqrt{x^2 - 4} \quad [0, \infty)$$

No restriction over the domain

$$f(x) = \sqrt{x^2 - 4}$$

(ii) Function's expression

$$f(x) = \sqrt{x^2 - 4}$$

(iii) Function's expression

$$f(x) = \sqrt{x^2 - 4}$$

(iv) Function's expression

$$f(x) = \sqrt{x^2 - 4}$$

(v) Function's expression

$$f(x) = \sqrt{x^2 - 4}$$

(i) Function's Graph

$$f(x) = \sqrt{x^2 - 4}$$

No restriction over the domain

$$f(x) = \sqrt{x^2 - 4}$$

Graphically represented by $y = \sqrt{x^2 - 4}$

$$f(x) = \sqrt{x^2 - 4} \quad [2, \infty)$$

(ii) Function's expression

$$f(x) = \sqrt{x^2 - 4} \quad [2, \infty)$$

$$f(x) = \sqrt{x^2 - 4}$$

(iii) Function's expression

$$f(x) = \sqrt{x^2 - 4} \quad [2, \infty)$$

No restriction over the domain

$$f(x) = \sqrt{x^2 - 4}$$

(iv) Function's expression

$$f(x) = \sqrt{x^2 - 4}$$

(v) Function's expression

$$f(x) = \sqrt{x^2 - 4}$$

(vi) Function's expression

$$f(x) = \sqrt{x^2 - 4} \quad [2, \infty)$$

(vii) Function's expression

$$f(x) = \sqrt{x^2 - 4} \quad [2, \infty)$$