

Assignment

Draw the graph of the following functions and identify the domain and range in each case.

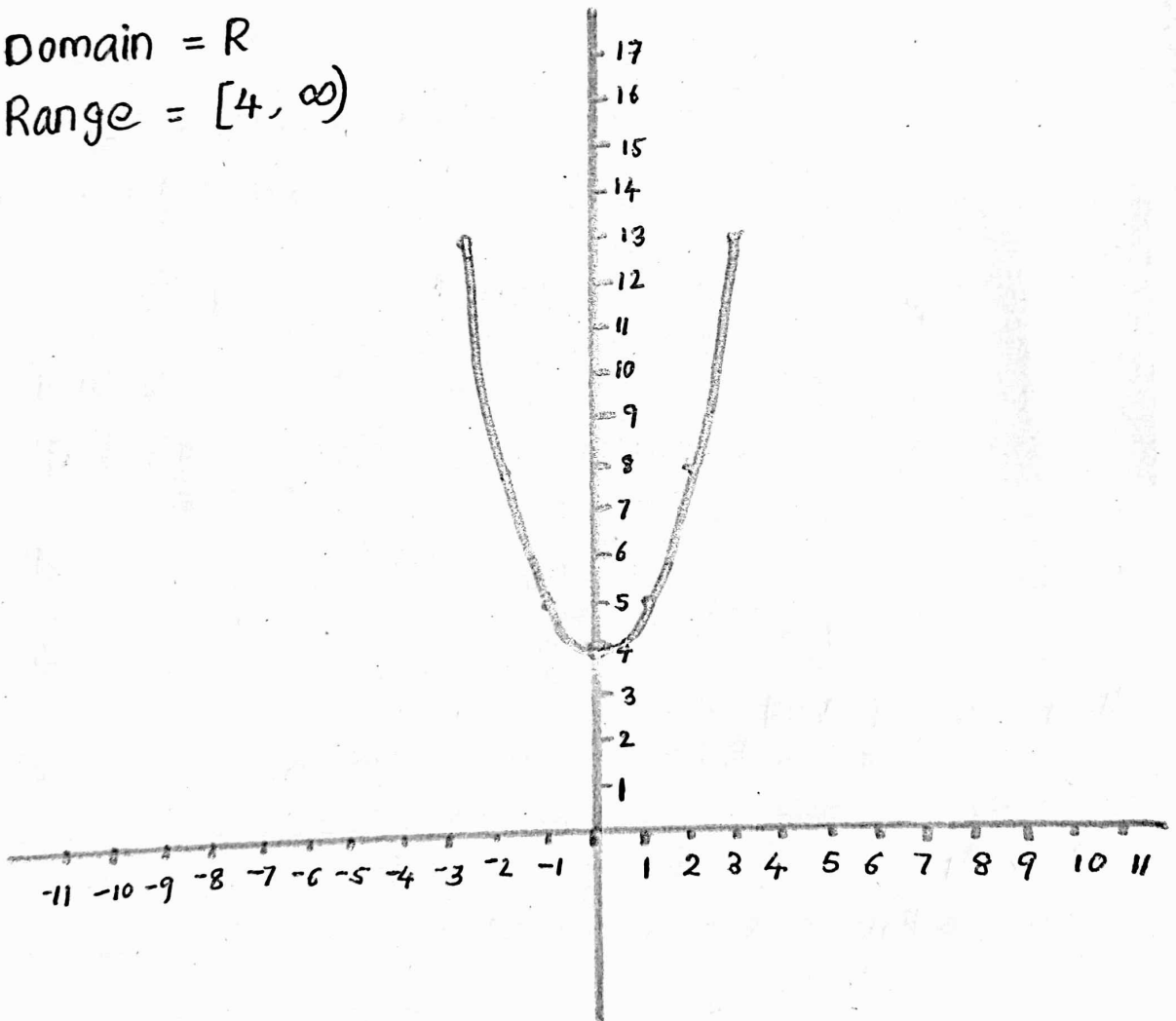
i) $f(x) = x^2 + 4$

Ans)

x	-3	-2	-1	0	1	2	3
$f(x) = y$	13	8	5	4	5	8	13

Domain = \mathbb{R}

Range = $[4, \infty)$



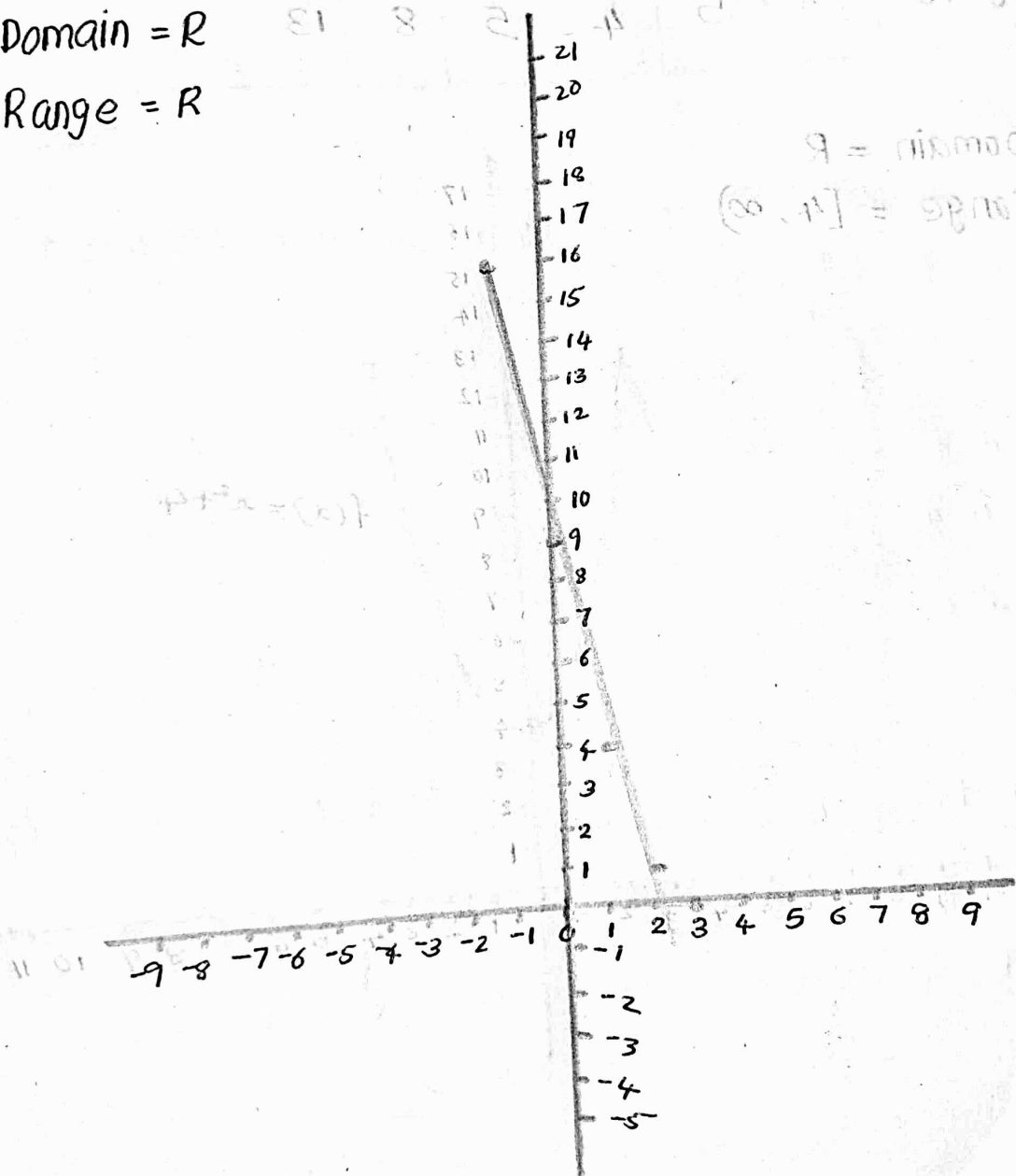
ii) $f(x) = (x - 3)^2$

Ans)

x	-3	-2	-1	0	1	2	3
$f(x) = y$	36	25	16	9	4	1	0

Domain = \mathbb{R}

Range = \mathbb{R}



ii) $f(x) = x^2 + 2x + 3$

Ans)

x	-3	-2	-1	0	1	2	3
$f(x)=y$	9	3	-2	3	6	15	18

Domain = \mathbb{R}

Range = \mathbb{R}

