

1) Find the domain of the function $f(x) = 9 - x^2$.	☐ A $\{-3, 3\}$	☐ B $\mathbb{R} = (-\infty, \infty)$	☐ C $(-3, 3)$	☐ D $[-3, 3]$
2) Find the range of the function $f(x) = 9 - x^2$.	☐ A $(-\infty, 9]$	☐ B $\mathbb{R} = (-\infty, \infty)$	☐ C $(-\infty, 9)$	☐ D $[9, \infty)$
3) Find the domain of the function $f(x) = 6 - 2x$.	☐ A $\mathbb{R} = (-\infty, \infty)$	☐ B $\{3\}$	☐ C $(-\infty, 3]$	☐ D $[3, \infty)$
4) Find the range of the function $f(x) = 6 - 2x$.	☐ A $(-\infty, 3]$	☐ B $\mathbb{R} = (-\infty, \infty)$	☐ C $[0, 3]$	☐ D $[3, \infty)$
5) Find the domain of the function $f(x) = x^2 - 2x - 3$.	☐ A $\mathbb{R} = (-\infty, \infty)$	☐ B $\{-1, 3\}$	☐ C $(-1, 3)$	☐ D $[-1, 3]$
6) Find the domain of the function $f(x) = 1 + 2x^3 - x^5$.	☐ A $\{-1, 2\}$	☐ B $\mathbb{R} = (-\infty, \infty)$	☐ C $(-2, 1)$	☐ D $[-1, 2]$
7) Find the domain of the function $f(x) = 5$.	☐ A $\mathbb{R} = (-\infty, \infty)$	☐ B $\{5\}$	☐ C $(-\infty, 5]$	☐ D $[5, \infty)$
8) Find the range of the function $f(x) = 5$.	☐ A $\mathbb{R} = (-\infty, \infty)$	☐ B $\{5\}$	☐ C $(-\infty, 5]$	☐ D $[5, \infty)$
9) Find the domain of the function $f(x) = x - 1 $.	☐ A $\{1\}$	☐ B $(-\infty, 1)$	☐ C $(1, \infty)$	☐ D $\mathbb{R} = (-\infty, \infty)$
10) Find the domain of the function $f(x) = x + 5 $.	☐ A $\{-5\}$	☐ B $\mathbb{R} = (-\infty, \infty)$	☐ C $(-5, \infty)$	☐ D $(-\infty, -5)$
11) Find the domain of the function $f(x) = x $.	☐ A $\{0\}$	☐ B $(-\infty, 0)$	☐ C $\mathbb{R} = (-\infty, \infty)$	☐ D $(0, \infty)$
12) Find the range of the function $f(x) = x $.	☐ A $(-\infty, 0]$	☐ B $\mathbb{R} = (-\infty, \infty)$	☐ C $(0, \infty)$	☐ D $[0, \infty)$
13) Find the domain of the function $f(x) = 3x - 6 $.	☐ A $\{2\}$	☐ B $(-\infty, 3]$	☐ C $[3, \infty)$	☐ D $\mathbb{R} = (-\infty, \infty)$
14) Find the domain of the function $f(x) = 9 - 3x $.	☐ A $\{3\}$	☐ B $\mathbb{R} = (-\infty, \infty)$	☐ C $(3, \infty)$	☐ D $(-\infty, 3)$

15) Find the domain of the function $f(x) = \frac{x+2}{x-3}$.
☐ A $(-\infty, \infty)$ ☐ B $\mathbb{R} \setminus \{3\}$ ☐ C $\mathbb{R} \setminus \{-2, 3\}$ ☐ D $(3, \infty)$
16) Find the domain of the function $f(x) = \frac{x-2}{x+3}$.
☐ A $(-\infty, \infty)$ ☐ B $(-\infty, 3)$ ☐ C $\mathbb{R} \setminus \{-3, 2\}$ ☐ D $\mathbb{R} \setminus \{-3\}$
17) Find the domain of the function $f(x) = \frac{x+2}{x^2-9}$.
☐ A $(-\infty, \infty)$ ☐ B $\mathbb{R} \setminus \{3\}$ ☐ C $\mathbb{R} \setminus \{-3, 3\}$ ☐ D $\mathbb{R} \setminus (-3, 3)$
18) Find the domain of the function $f(x) = \frac{x+2}{x^2-5x+6}$.
☐ A $(-\infty, \infty)$ ☐ B $\mathbb{R} \setminus \{-3, -2\}$ ☐ C $\mathbb{R} \setminus \{2, 3\}$ ☐ D $\mathbb{R} \setminus (2, 3)$
19) Find the domain of the function $f(x) = \frac{x+5}{x^2-x-6}$.
☐ A $(-\infty, \infty)$ ☐ B $\mathbb{R} \setminus \{-3, 2\}$ ☐ C $\mathbb{R} \setminus \{-2, 3\}$ ☐ D $\mathbb{R} \setminus (-2, 3)$
20) Find the domain of the function $f(x) = \frac{x+2}{x^2+9}$.
☐ A $(-\infty, \infty)$ ☐ B $\mathbb{R} \setminus \{-9\}$ ☐ C $\mathbb{R} \setminus \{-3, 3\}$ ☐ D $\mathbb{R} \setminus (-3, 3)$
21) Find the domain of the function $f(x) = \sqrt[3]{x-3}$.
☐ A $\mathbb{R} = (-\infty, \infty)$ ☐ B $(-\infty, 3]$ ☐ C $[3, \infty)$ ☐ D $[-3, \infty)$
22) Find the domain of the function $f(x) = \sqrt{x-3}$.
☐ A $\mathbb{R} = (-\infty, \infty)$ ☐ B $(-\infty, 3]$ ☐ C $[3, \infty)$ ☐ D $[-3, \infty)$
23) Find the domain of the function $f(x) = \sqrt{3-x}$.
☐ A $\mathbb{R} = (-\infty, \infty)$ ☐ B $(-\infty, 3]$ ☐ C $[3, \infty)$ ☐ D $[-3, \infty)$
24) Find the domain of the function $f(x) = \sqrt{x+3}$.
☐ A $\mathbb{R} = (-\infty, \infty)$ ☐ B $(-\infty, -3]$ ☐ C $[3, \infty)$ ☐ D $[-3, \infty)$
25) Find the domain of the function $f(x) = \sqrt{-x}$.
☐ A $\mathbb{R} = (-\infty, \infty)$ ☐ B $(-\infty, 0]$ ☐ C $[0, \infty)$ ☐ D $(-\infty, 0)$
26) Find the range of the function $f(x) = \sqrt{-x}$.
☐ A $(-\infty, 0]$ ☐ B $\mathbb{R} = (-\infty, \infty)$ ☐ C $(-\infty, 0) \cup (0, \infty)$ ☐ D $[0, \infty)$
27) Find the domain of the function $f(x) = \sqrt{9-x^2}$.
☐ A $(-3, 3)$ ☐ B $[-3, 3]$ ☐ C $(-\infty, -3) \cup (3, \infty)$ ☐ D $(-\infty, -3] \cup [3, \infty)$

28) Find the domain of the function $f(x) = \frac{x+2}{\sqrt{x-3}}$.
☐ A $(-\infty, \infty)$ ☐ B $[-2, 3]$ ☐ C $(3, \infty)$ ☐ D $[3, \infty)$
29) Find the domain of the function $f(x) = \frac{x+2}{\sqrt{9-x^2}}$.
☐ A $(-3, 3)$ ☐ B $[-3, 3]$ ☐ C $(-\infty, -3) \cup (3, \infty)$ ☐ D $(-\infty, -3] \cup [3, \infty)$
30) Find the domain of the function $f(x) = \sqrt{x^2-9}$.
☐ A $(-3, 3)$ ☐ B $[-3, 3]$ ☐ C $(-\infty, -3) \cup (3, \infty)$ ☐ D $(-\infty, -3] \cup [3, \infty)$
31) Find the range of the function $f(x) = \sqrt{x^2-9}$.
☐ A $(-\infty, 0]$ ☐ B $\mathbb{R} = (-\infty, \infty)$ ☐ C $[9, \infty)$ ☐ D $[0, \infty)$
32) Find the domain of the function $f(x) = \frac{x+2}{\sqrt{x^2-9}}$.
☐ A $(-3, 3)$ ☐ B $[-3, 3]$ ☐ C $(-\infty, -3) \cup (3, \infty)$ ☐ D $(-\infty, -3] \cup [3, \infty)$
33) Find the domain of the function $f(x) = \sqrt{9+x^2}$.
☐ A $(-\infty, \infty)$ ☐ B $[-3, 3]$ ☐ C $\{-3, 3\}$ ☐ D $(-\infty, -3] \cup [3, \infty)$
34) Find the domain of the function $f(x) = \sqrt[4]{x^2-25}$.
☐ A $(-5, 5)$ ☐ B $[-5, 5]$ ☐ C $(-\infty, -5] \cup [5, \infty)$ ☐ D $(-\infty, -5) \cup (5, \infty)$
35) Find the domain of the function $f(x) = \sqrt[6]{16-x^2}$.
☐ A $(-4, 4)$ ☐ B $[-4, 4]$ ☐ C $(-\infty, -4) \cup (4, \infty)$ ☐ D $(-\infty, -4] \cup [4, \infty)$
36) Find the range of the function $f(x) = \sqrt{16-x^2}$.
☐ A $(-\infty, 4]$ ☐ B $\mathbb{R} = (-\infty, \infty)$ ☐ C $[0, 4]$ ☐ D $[4, \infty)$
37) Find the domain of the function $f(x) = \frac{x+ x }{x}$.
☐ A $(-\infty, 0) \cup (0, \infty)$ ☐ B $\mathbb{R}$ ☐ C $(0, \infty)$ ☐ D $(-\infty, 0]$
38) Find the domain of the function $f(x) = \begin{cases} \frac{1}{x} & ; x < 0 \\ x & ; x \geq 0 \end{cases}$.
☐ A $(-\infty, 0) \cup (0, \infty)$ ☐ B $\mathbb{R}$ ☐ C $(0, \infty)$ ☐ D $(-\infty, 0]$
39) Find the domain of the function $f(x) = \frac{2-\sqrt{x}}{\sqrt{x^2+1}}$.
☐ A $(-\infty, -1) \cup (1, \infty)$ ☐ B $\mathbb{R}$ ☐ C $(0, \infty)$ ☐ D $[0, \infty)$

40)	Find the domain of the function $f(x) = \sqrt{x-1} + \sqrt{x+3}$.						
☐ A	$[-3, \infty)$	☐ B	$\mathbb{R}$	☐ C $[-3, 1]$	☐ D $[1, \infty)$		
41)	The function $f(x) = 3x^4 + x^2 + 1$ is						
☐ A	cubic	☐ B	quadratic	☐ C	linear	☐ D	polynomial
42)	The function $f(x) = 5x^3 + x^2 + 7$ is						
☐ A	cubic	☐ B	quadratic	☐ C	linear	☐ D	power
43)	The function $f(x) = -3x^2 + 7$ is						
☐ A	cubic	☐ B	quadratic	☐ C	linear	☐ D	power
44)	The function $f(x) = 2x + 3$ is						
☐ A	cubic	☐ B	quadratic	☐ C	linear	☐ D	power
45)	The function $f(x) = x^7$ is						
☐ A	cubic	☐ B	quadratic	☐ C	linear	☐ D	power
46)	The function $f(x) = \frac{2x+3}{x^2-1}$ is						
☐ A	rational	☐ B	quadratic	☐ C	linear	☐ D	polynomial
47)	The function $f(x) = \frac{x-3}{x+2}$ is						
☐ A	algebraic	☐ B	trigonometric	☐ C	exponential	☐ D	polynomial
48)	The function $f(x) = \sin x$ is						
☐ A	algebraic	☐ B	trigonometric	☐ C	exponential	☐ D	polynomial
49)	The function $f(x) = e^x$ is						
☐ A	algebraic	☐ B	trigonometric	☐ C	natural exponential	☐ D	polynomial
50)	The function $f(x) = 3^x$ is						
☐ A	algebraic	☐ B	trigonometric	☐ C	general exponential	☐ D	polynomial
51)	The function $f(x) = x^2 + \sqrt{x-2}$ is						
☐ A	algebraic	☐ B	trigonometric	☐ C	exponential	☐ D	polynomial
52)	The function $f(x) = -3$ is						
☐ A	cubic	☐ B	quadratic	☐ C	linear	☐ D	constant
53)	The function $f(x) = \log_3 x$ is						
☐ A	natural logarithmic	☐ B	trigonometric	☐ C	general logarithmic	☐ D	polynomial
54)	The function $f(x) = \ln x$ is						
☐ A	natural logarithmic	☐ B	trigonometric	☐ C	rational	☐ D	polynomial
55)	The function $f(x) = 3x^4 + x^2 + 1$ is						
☐ A	Even	☐ B	Odd	☐ C	Even and odd	☐ D	Neither even nor odd

56)	The function $f(x) = 9 - x^2$ is	☐ A Even	☐ B Odd	☐ C Even and odd	☐ D Neither even nor odd
57)	The function $f(x) = x^5 - x$ is	☐ A Even	☐ B Odd	☐ C Even and odd	☐ D Neither even nor odd
58)	The function $f(x) = 2 - \sqrt[5]{x}$ is	☐ A Even	☐ B Odd	☐ C Even and odd	☐ D Neither even nor odd
59)	The function $f(x) = 3x + \frac{2}{\sqrt{x^2 + 9}}$ is	☐ A Even	☐ B Odd	☐ C Even and odd	☐ D Neither even nor odd
60)	The function $f(x) = \frac{3}{\sqrt{x^2 + 9}}$ is	☐ A Even	☐ B Odd	☐ C Even and odd	☐ D Neither even nor odd
61)	The function $f(x) = \sqrt{4 + x^2}$ is	☐ A Even	☐ B Odd	☐ C Even and odd	☐ D Neither even nor odd
62)	The function $f(x) = 3$ is	☐ A Even	☐ B Odd	☐ C Even and odd	☐ D Neither even nor odd
63)	The function $f(x) = \frac{9 - x^2}{x - 2}$ is	☐ A Even	☐ B Odd	☐ C Even and odd	☐ D Neither even nor odd
64)	The function $f(x) = \frac{x^2 - 4}{x^2 + 1}$ is	☐ A Even	☐ B Odd	☐ C Even and odd	☐ D Neither even nor odd
65)	The function $f(x) = 3 x $ is	☐ A Even	☐ B Odd	☐ C Even and odd	☐ D Neither even nor odd
66)	The function $f(x) = x^{-2}$ is	☐ A Even	☐ B Odd	☐ C Even and odd	☐ D Neither even nor odd
67)	The function $f(x) = x^3 - 2x + 5$ is	☐ A Even	☐ B Odd	☐ C Even and odd	☐ D Neither even nor odd
68)	The function $f(x) = \sqrt[3]{x^5} - x^3 + x$ is	☐ A Even	☐ B Odd	☐ C Even and odd	☐ D Neither even nor odd
69)	The function $f(x) = 7$ is	☐ A Even	☐ B Odd	☐ C Even and odd	☐ D Neither even nor odd

70)	The function $f(x) = \frac{x^3 - 4}{x^3 + 1}$ is	☐ A Even	☐ B Odd	☐ C Even and odd	☐ D Neither even nor odd
71)	The function $f(x) = \frac{x^2 - 1}{x^3 + 3}$ is	☐ A Even	☐ B Odd	☐ C Even and odd	☐ D Neither even nor odd
72)	The function $f(x) = x^6 - 4x^2 + 1$ is	☐ A Even	☐ B Odd	☐ C Even and odd	☐ D Neither even nor odd
73)	The function $f(x) = x^2$ is increasing on	☐ A $(-\infty, 0)$	☐ B $(0, \infty)$	☐ C $(-\infty, \infty)$	☐ D Nowhere
74)	The function $f(x) = x^2$ is decreasing on	☐ A $(-\infty, 0)$	☐ B $(0, \infty)$	☐ C $(-\infty, \infty)$	☐ D Nowhere
75)	The function $f(x) = x^3$ is increasing on	☐ A $(-\infty, 0)$	☐ B $(0, \infty)$	☐ C $(-\infty, \infty)$	☐ D Nowhere
76)	The function $f(x) = x^3$ is decreasing on	☐ A $(-\infty, 0)$	☐ B $(0, \infty)$	☐ C $(-\infty, \infty)$	☐ D Nowhere
77)	The function $f(x) = \sqrt{x}$ is increasing on	☐ A $(-\infty, 0)$	☐ B $(0, \infty)$	☐ C $(-\infty, \infty)$	☐ D Nowhere
78)	The function $f(x) = \sqrt{x}$ is decreasing on	☐ A $(-\infty, 0)$	☐ B $(0, \infty)$	☐ C $(-\infty, \infty)$	☐ D Nowhere
79)	The function $f(x) = \frac{1}{x}$ is increasing on	☐ A $(-\infty, 0)$	☐ B $(0, \infty)$	☐ C $(-\infty, \infty)$	☐ D Nowhere
80)	The function $f(x) = \frac{1}{x}$ is decreasing on	☐ A $(-\infty, 0) \cup (0, \infty)$	☐ B $(0, \infty)$	☐ C $(-\infty, \infty)$	☐ D Nowhere