

Functions (Domain)

Determine the domain of the following functions.

1. $f(x) = \frac{4}{x^2}$

2. $f(x) = \frac{4}{x^3}$

3. $f(x) = \frac{1}{x^2-9}$

4. $f(x) = \frac{1}{x^2-16}$

5. $f(x) = \frac{1}{2x^2-8}$

6. $f(x) = \frac{1}{3x^2-3}$

7. $f(x) = \frac{1}{x^2+36}$

8. $f(x) = \frac{1}{x^2+49}$

9. $f(x) = \frac{1}{x^2+8x+15}$

10. $f(x) = \frac{1}{x^2+10x+24}$

11. $f(x) = \frac{1}{x^2+2x-8}$

12. $f(x) = \frac{1}{x^2-x-30}$

13. $f(x) = \frac{10}{x^3-2x^2-35x}$

14. $f(x) = \frac{10}{x^3+4x^2-12x}$

15. $f(x) = \frac{7}{x^3-1}$

16. $f(x) = \frac{7}{x^3-8}$

17. $f(x) = \frac{7}{x^4-8x}$

18. $f(x) = \frac{7}{x^4+8x}$

19. $f(x) = \frac{12}{3x^2-7x-20}$

20. $f(x) = \frac{12}{2x^2-7x-15}$

21. $f(x) = \frac{9}{4x^2+23x-6}$

22. $f(x) = \frac{9}{3x^2+23x+14}$

23. $f(x) = \sqrt{16-x^2}$

24. $f(x) = \sqrt{9-x^2}$

25. $f(x) = \sqrt{x^2+10x+24}$

26. $f(x) = \sqrt{x^2+8x+15}$

27. $f(x) = \sqrt{x^2-x-20}$

28. $f(x) = \sqrt{x^2+2x-8}$

29. $f(x) = \sqrt{2x^2-7x-15}$

30. $f(x) = \sqrt{3x^2-7x-20}$

31. $f(x) = \sqrt{3x^2+23x+14}$

32. $f(x) = \sqrt{4x^2+23x-6}$

33. $f(x) = \frac{1}{\sqrt{x^2-16}}$

34. $f(x) = \frac{1}{\sqrt{x^2-9}}$

35. $f(x) = \frac{1}{\sqrt{x^2-x-30}}$

36. $f(x) = \frac{1}{\sqrt{x^2+2x-8}}$

$$37. f(x) = \frac{1}{\sqrt{2x^2 - 7x - 15}}$$

$$39. f(x) = \frac{1}{\sqrt{9 - x^2}}$$

$$38. f(x) = \frac{1}{\sqrt{3x^2 - 7x - 20}}$$

$$40. f(x) = \frac{1}{\sqrt{16 - x^2}}$$