

Curve Sketching

Sketch the curves by using translation and reflection.

1. $f(x) = x^2 + 3$

2. $f(x) = x^2 + 5$

3. $f(x) = |x| - 2$

4. $f(x) = |x| - 6$

5. $f(x) = \sqrt{x} - 4$

6. $f(x) = \sqrt{x} - 2$

7. $f(x) = x^3 + 1$

8. $f(x) = x^3 + 5$

9. $f(x) = -x^2 + 5$

10. $f(x) = -x^2 + 5$

11. $f(x) = (x - 3)^2$

12. $f(x) = (x - 5)^2$

13. $f(x) = |x + 2|$

14. $f(x) = |x + 5|$

15. $f(x) = (x - 6)^3 + 2$

16. $f(x) = (x - 5)^3 + 1$

17. $f(x) = \sqrt{x} - 1$

18. $f(x) = \sqrt{x} - 2$

19. $f(x) = e^{x+3} - 5$

20. $f(x) = e^{x+2} - 4$

21. $f(x) = \frac{1}{x-4}$

22. $f(x) = \frac{1}{x-2}$

23. $f(x) = -\frac{1}{x+3}$

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

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

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

27. $f(x) = \frac{1}{x} + 4$

28. $f(x) = \frac{1}{x} + 2$

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

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

31. $f(x) = \frac{1}{x-4} + 3$

32. $f(x) = \frac{1}{x-5} + 2$

33. $f(x) = \log(x - 3)$

34. $f(x) = \log(x - 4)$

35. $f(x) = \ln(x + 5) - 4$

36. $f(x) = \ln(x + 2) - 5$

37. $f(x) = (x - 5)^2 - 3$

38. $f(x) = (x - 5)^2 - 3$

$$39. f(x) = |x + 6| - 2$$

$$41. f(x) = \sqrt{x + 5} - 1$$

$$43. f(x) = -(x - 5)^2$$

$$45. f(x) = -|x + 5| + 3$$

$$47. f(x) = -(x - 5)^3 + 1$$

$$49. f(x) = -\sqrt{x} - 2$$

$$51. f(x) = -\frac{1}{x-2} + 1$$

$$53. f(x) = -\frac{1}{(x-6)^2}$$

$$55. f(x) = -e^{x+2} - 4$$

$$57. f(x) = -\log(x - 4)$$

$$59. f(x) = -e^x + 4$$

$$40. f(x) = |x + 8| - 3$$

$$42. f(x) = \sqrt{x + 4} - 2$$

$$44. f(x) = -(x - 3)^2$$

$$46. f(x) = -|x + 2| + 4$$

$$48. f(x) = -(x - 6)^3 + 2$$

$$50. f(x) = -\sqrt{x} - 1$$

$$52. f(x) = -\frac{1}{x-4} + 4$$

$$54. f(x) = -\frac{1}{(x-2)^2}$$

$$56. f(x) = -e^{x+3} - 5$$

$$58. f(x) = -\log(x - 3)$$

$$60. f(x) = -e^x - 5$$