3.2: Answers

5. **(a)** All points in $[-3, 2]$

(b) None

(c) None

6. **(a)** All points in $[-2, 3]$

(b) None

(c) None

7. **(a)** All points in $[-3, 3]$ except $x = 0$

(b) None

(c) $x = 0$

8. **(a)** All points in $[-2, 3]$ except $x = -1, 0, 2$

(b) $x = -1$

(c) $x = 0$, $x = 2$

9. **(a)** All points in $[-1, 2]$ except $x = 0$

(b) $x = 0$

(c) None

11. disc (jump)

12. cusp

10. **(a)** All points in $[-3, 3]$ except $x = -2, 2$

(b) $x = -2$, $x = 2$

(c) None

14. Vertical tangent

~~**21.** 8.000001, yes~~

~~**22.** 8.000001, yes~~

40. True

41. False

42. B

43. A

44. B

45. C

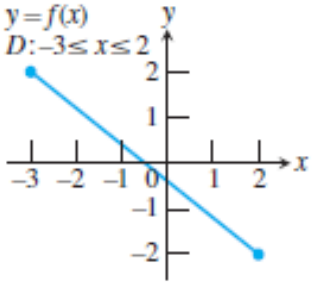
In Exercises 5–10, the graph of a function over a closed interval D is given. At what domain points does the function appear to be

(a) differentiable? **(b)** continuous but not differentiable?

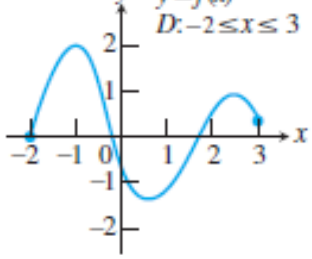
(c) neither continuous nor differentiable?

All points in $[-3, 2]$ **(b)** None **(c)** None **(a)** All points in $[-2, 3]$ **(b)** None **(c)** N

5. $y = f(x)$, $D: -3 \le x \le 2$

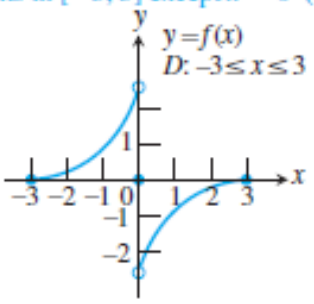


6. $y = f(x)$, $D: -2 \le x \le 3$

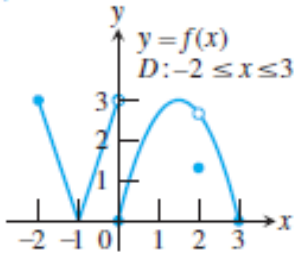


l points in $[-3, 3]$ except $x = 0$ **(b)** None **(c)** $x = 0$

7. $y = f(x)$, $D: -3 \le x \le 3$



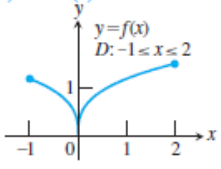
8. $y = f(x)$, $D: -2 \le x \le 3$



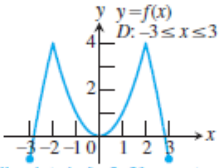
(a) All points in $[-2, 3]$ except $x = -1$, (

(b) $x = -1$ (c) $x = 0$, $x = 2$

9. (b) $x = 0$ (c) None



10.



(a) All points in $[-3, 3]$ except $x = -2$,