

Answers

- |  |                  |   |   |
|--|------------------|---|---|
| 1. 5   | 16. $-9$         | 32. $\lim_{x \rightarrow -2^-} = 1$<br>$\lim_{x \rightarrow -2^+} = 2$            | 44. $\lim_{x \rightarrow 4^-} = -\infty$<br>$\lim_{x \rightarrow 4^+} = \infty$   |
| 2. $-1/4$  | 17. 0            | 33. 9   | 45. $\infty$  |
| 3. $1/7$   | 18. $2x$         | 34. $\lim_{x \rightarrow -3^-} = -2$<br>$\lim_{x \rightarrow -3^+} = 2$           | 46. $\lim_{x \rightarrow -2^-} = \infty$<br>$\lim_{x \rightarrow -2^+} = -\infty$ |
| 4. $1/4$   | 19. $3x^2$       | 35. $\lim_{x \rightarrow 0^-} = 2$<br>$\lim_{x \rightarrow 0^+} = 4$              | 47. $\lim_{x \rightarrow 13^-}$ dne<br>$\lim_{x \rightarrow 13^+} = \infty$       |
| 5. $\lim_{x \rightarrow -3^-} = -\infty$<br>$\lim_{x \rightarrow -3^+} = \infty$ | 20. $\sqrt{3}/6$ | 36. $-3/2$  | 48. $\lim_{x \rightarrow 0^-} = \infty$<br>$\lim_{x \rightarrow 0^+}$ dne         |
| 6. $11/4$  | 21. $1/3$        | 37. $3/5$   | 49. $-2$  |
| 7. 1   | 22. $1/4$        | 38. $2\sqrt{6}$   | 50. $-\infty$   |
| 8. $1/3$   | 23. $3/4$        | 39. $\lim_{x \rightarrow 7^-} = 0$<br>$\lim_{x \rightarrow 7^+}$ dne              | 51. $2/5$   |
| 9. $-4$  | 24. $1/48$       | 40. $\lim_{x \rightarrow 3^-} = 0$<br>$\lim_{x \rightarrow 3^+}$ dne              | 52. $-1/6$  |
| 10. $-1$   | 25. $1/24$       | 41. $\lim_{x \rightarrow -1^-} = \infty$<br>$\lim_{x \rightarrow -1^+} = -\infty$ | 53. 3   |
| 11. $-7/4$   | 26. $1/16$       | 42. $\infty$  | 54. $\infty$  |
| 12. $3/5$  | 27. $-1/9$       | 43. $\lim_{x \rightarrow -2^-} = \infty$<br>$\lim_{x \rightarrow -2^+} = -\infty$ | 55. dne   |
| 13. $\lim_{x \rightarrow 8^-} = -\infty$<br>$\lim_{x \rightarrow 8^+} = \infty$  | 28. $1/54$       |   | 56. $1/2$   |
| 14. $-6/7$   | 29. $-1/x^2$     |   |   |
| 15. $-5/8$   | 30. $-2$         |   |   |
|  | 31. $-1/25$      |   |   |