

## Answers for Lesson 7-1 Exercises

- 1.** 15, -15      **2.** 0.07, -0.07      **3.** none  
**4.**  $\frac{8}{13}, -\frac{8}{13}$       **5.** -4      **6.** 0.5  
**7.**  $\frac{1}{2}$       **8.** 0.07      **9.** 2, -2  
**10.**  $\frac{10}{3}, -\frac{10}{3}$       **11.** 0.3, -0.3      **12.**  
**13.** 6      **14.** -6  
**15.** no real-number root      **16.** 0.6  
**17.** -4      **18.** -4  
**19.** -3      **20.** no real-number root  
**21.**  $4|x|$       **22.**  $0.5|x^3|$       **23.**  $x^4|y^9|$   
**24.**  $8b^{24}$       **25.**  $-4a$       **26.**  $3y^2$   
**27.**  $x^2|y^3|$       **28.**  $2y^2$       **29.** 1.34 in.  
**30.** 1.68 ft      **31.** 0.48 cm      **32.** 0.08 mm  
**33.** 10, -10      **34.** 1, -1      **35.** 0.5, -0.5  
**36.**  $\frac{2}{3}, -\frac{2}{3}$       **37.**  $\sqrt[3]{-64}, \sqrt[6]{64}, -\sqrt[3]{-64}, \sqrt{64}$   
**38.** **a**  $\approx$  35 ft  
**b**  $\approx$  20 ft longer  
**39.** 0.5      **40.**  $\frac{1}{3}$       **41.** 0.2  
**42.**  $\frac{1}{4}$       **43.**  $2|c|$       **44.**  $3\sqrt[3]{3xy^2}$   
**45.**  $12y^2z^2|x|\sqrt{xy}$       **46.**  $y^4$       **47.**  $-y^4$   
**48.**  $k^3$       **49.**  $-k^3$       **50.**  $|x + 3|$   
**51.**  $(x + 1)^2$       **52.**  $|x|$   
**53.**  $x^2$       **54.**  $|x^3|$

## Answers for Lesson 7-1 Exercises (cont.)

---

55. Answers may vary. Sample:  $\sqrt[3]{-8x^6}$ ,  $-\sqrt[4]{16x^8}$ ,  $\sqrt[5]{-32x^{10}}$
56. **a.** for all positive integers  
**b.** for all odd positive integers
57. Yes, because 10 is really  $10^1$ .
58. All;  $x^2$  is always nonnegative.
59. Some; true only for  $x \geq 0$ .
60. Some; true only for  $x = -1, 0, 1$ .
61. Some; true only for  $x \geq 0$ .
- |           |           |             |           |
|-----------|-----------|-------------|-----------|
| 62. $ m $ | 63. $m^2$ | 64. $ m^3 $ | 65. $m^4$ |
| 66. $m$   | 67. $m^2$ | 68. $m^3$   | 69. $m^4$ |