

Answers to Chapter 11 Redo Requirement

1a. $x = -5$ or $x = 2$

1b. $x = -2$ or $x = -4$

2a. $a = \frac{-2}{3}$ or $a = 4$

2b. $n = \frac{1}{2}$ or $n = \frac{3}{2}$

3a. $x = -1$ or $x = -7$

3b. $a = 2$ or $a = 10$

4a. $y = \frac{3 \pm \sqrt{3}}{2}$

4b. $2 \pm 2\sqrt{3}$

5a. 2 Non-Real Solutions

5b. 2 Non-Real Solutions

6a. All Real Numbers

6b. All Real Numbers

7a. No Solution

7b. No Solution

8a. $disc = 32$; 2 irrational solutions;
 $y = 3 \pm 2\sqrt{2}$; $y \approx 5.83$ and $y \approx 0.17$

8b. $disc = -31$; 2 Non-Real Solutions

9a. $t = \pm\sqrt{h - ma}$

9b. $r = \pm\sqrt{\frac{z + a}{5\pi}}$

9c. $n = \pm\sqrt{p^2 - m^2}$

10a. The shorter leg is 5 inches long.

10b. The hypotenuse is $8\sqrt{2} \approx 11.31$ inches long.

11a. $d = 2$

11b. $d = 2\sqrt{13} \approx 7.2111$

12a. 15.47%

12b. 18.32%

13a. (See Table and Graph)
 $x = -1$ or $x = 4$

13b. (See Table and Graph)
 $x = 0$ or $x = 8$

14a. $6\sqrt{5}$

14b. $5\sqrt{5}$

15a. $\frac{1}{2}$

15b. $\frac{\sqrt{105}}{15}$