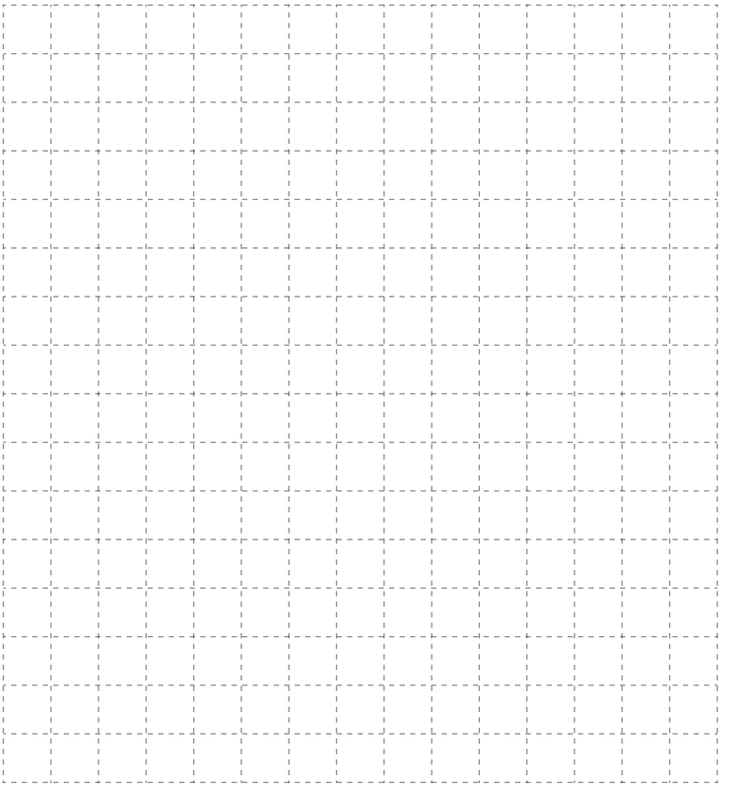
Lesson 2.4: Quadratic Equations

Complete the *Practice* below. When you have completed all the questions for *Lesson 2.4 Practice – VI* with your best work, mark your work by first comparing your answers to the solutions provided in the *Appendix*. Then, apply the rubric found at the beginning of the *Workbook*.

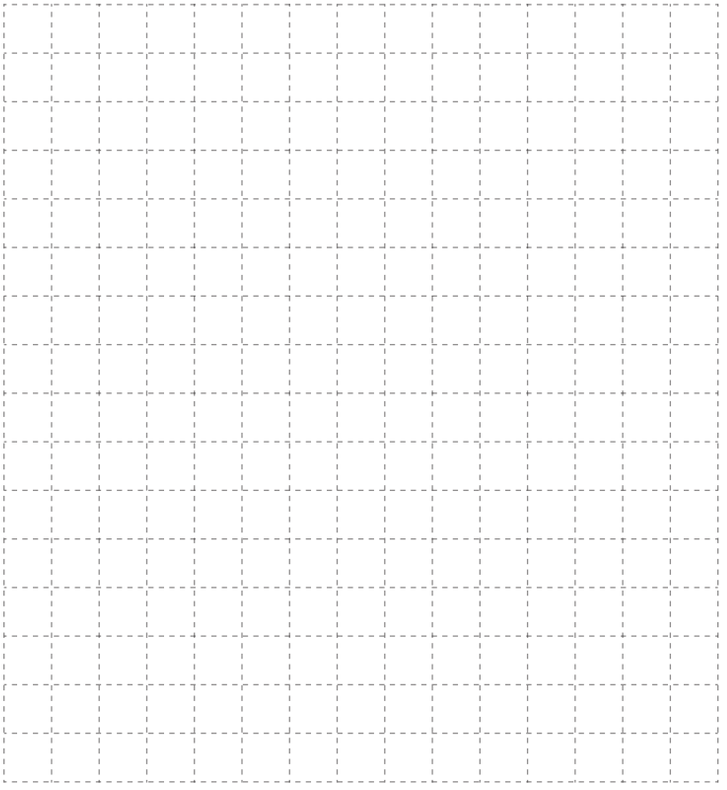
Practice – VI

1. Solve each equation by graphing the corresponding function.

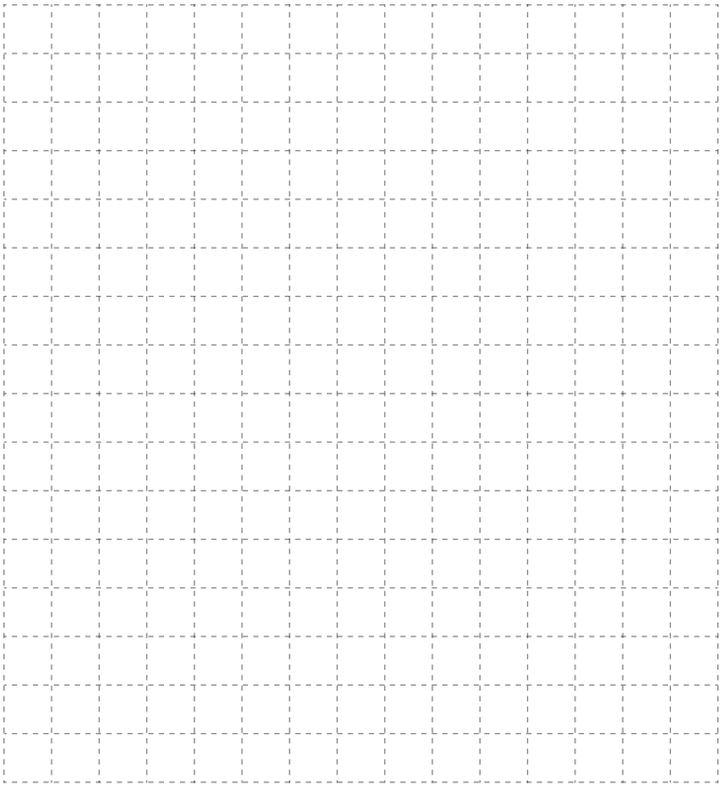
   a. $x^2 - 8 = -2x$



b. $-3q^2 - 8q + 11 = 0$



c. $n^2 - 4n = -4$



2. Solve each equation by factoring.

   a. $2s^2 + 12s + 18 = 0$

   b. $\frac{1}{4}x^2 + \frac{5}{4}x = -1$

   c. $2z^2 - 15 = -7z$

3. Solve each equation using square roots. Leave your answers as exact values.

   a. $-w^2 + 3 = -2$

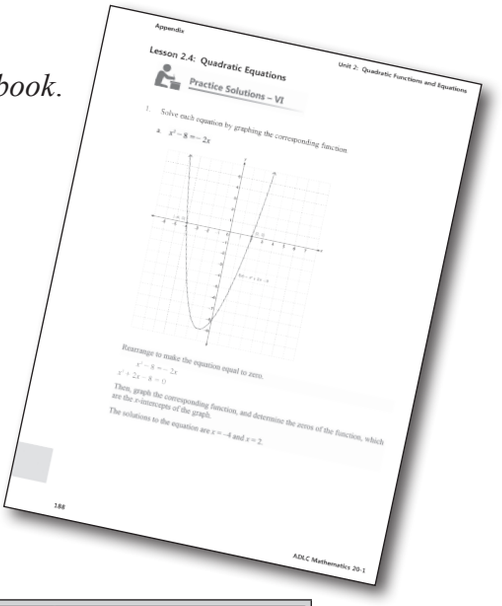
   b. $(x+3)^2 = 7$

   c. $4(r+6)^2 = 3$

Mark your work for *Lesson 2.4 Practice – VI* using the solutions provided in the *Appendix*. Then, apply the rubric found at the beginning of the *Workbook*.

Transfer your self-assessed mark to the front cover of the *Workbook*.

My self-assessed mark on *Lesson 2.4 Practice – VI* is _____.


Appendix

Lesson 2.4: Quadratic Equations

Unit 2: Quadratic Functions and Equations

Practice Solutions – VI

1. Solve each equation by graphing the corresponding function.

a. $x^2 - 8 = -2x$

Rearrange to make the equation equal to zero.

$x^2 - 8 = -2x$

$x^2 + 2x - 8 = 0$

Then, graph the corresponding function, and determine the zeros of the function, which are the x-intercepts of the graph.

The solutions to the equation are $x = -4$ and $x = 2$.

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Reflect on your understanding of the concepts addressed in the *Practice* exercises in the table provided.

Question Number	Got it!	Almost there…	Need to retry or ask for help.	Similar questions from ***Pre-Calculus 11***
1				p. 125 #3, 4
2				p. 230 #7ace, 8bdf, 9ace, 10bdf
3				p. 240 #4c, 5ace, 6bdf, 7ace

Please return to *Lesson 2.4* to continue your work in *Unit 2: Quadratic Functions and Equations*.