

Lesson 7.4: Equations and Inequalities

Complete the *Practice* below. When you have completed all the questions for *Lesson 7.4 Practice – V* with your best work, mark your work by first comparing your answers to the solutions provided in *Appendix 2: Solutions*. Then, apply the rubric found at the beginning of the *Workbook*.



Practice – V

1. Solve $x^2 - 9x + 18 \geq 0$ using sign analysis. Represent the solution set symbolically and on a number line.

2. The ‘case analysis’ method for solving a quadratic inequality is shown on p. 479 of *Pre-Calculus 11*.

- a. Explain the case analysis strategy.

- b. Describe how the case analysis strategy is similar to the sign analysis strategy?

- c. Solve $x(x + 1) < 0$ using the case analysis strategy.

3. A golfer makes a chip shot that travels 40 feet over flat terrain before landing. If the ball follows a parabolic path, and the maximum height reached by the ball is 33 feet, during what interval is the ball above 25 feet?



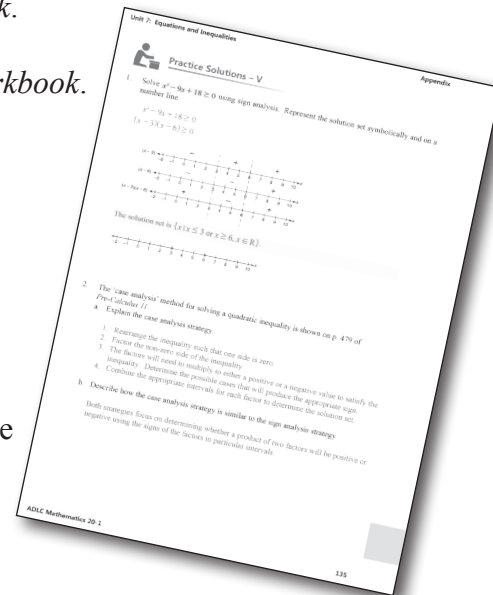
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Mark your work for *Lesson 7.4 Practice – V* using the solutions provided in *Appendix 2: Solutions*. Then, apply the rubric found at the beginning of the *Workbook*.

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

My self-assessed mark on *Lesson 7.4 Practice – V* is _____.

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 <i>Pre-Calculus 11</i>
1				p.485 #5ac
2				p.485 #6ab
3				p.485 #11

You may proceed to *Explore Your Understanding Assignment* on the next page of this *Workbook*.

Note: Before you complete *Explore Your Understanding*, you may review your skills and get more practice by completing the following problems in *Pre-Calculus 11*.

- Page 484, #1, 2, 4ac, 5ac, 6ab, 7ab, and 11

Check your work in *Enhance Your Understanding*.

