Lesson 4.2: Primary Trigonometric Ratios

Complete the *Practice* below. When you have completed all the questions for *Lesson 4.2 Practice – III* 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 – III

1. Consider the equation $\cos\theta = -\dfrac{2}{3}$ for $0° \leq \theta < 360°$.

   a. Sketch a diagram showing the two possible terminal arms of θ, in standard position.

    b. Determine all possible values of θ, to the nearest tenth of a degree.

2. Solve the equation $\tan\theta = -1$ for $0° \leq \theta < 360°$.

3. Solve the equation $\sin\theta = 0.996195$ for $0° \leq \theta < 360°$, to the nearest degree.

4. James works for a catering business. He wonders what angle each guest's place setting makes with the centre of a round table. Using one table setting as $0°$, the fifth table setting has a trigonometric ratio of $\tan\theta = 0.36397$ in Quadrant III. Determine the number of people sitting at the table and the angle each guest's place setting makes with the centre of the table.

Mark your work for *Lesson 4.2 Practice – III* 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 4.2 Practice – III* is _____.

Reflect on your understanding of the concepts addressed in the *Practice* exercises in the table provided.
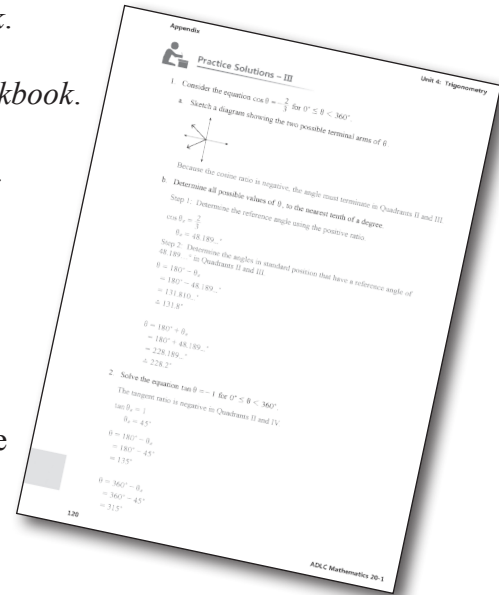
Question Number	Got it!	Almost there…	Need to retry or ask for help.	Similar questions from *Pre-Calculus 11*
1				p. 96 #7, 8ac, 16
2				p. 97 #9ace
3				p. 97 #12, 13
4				

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 96 #2, 3ac, 4ac, 5ac, 6, 7, 8ac, 9ace, 12, 13, 16, 18ace, and 19

Check your work in *Enhance Your Understanding*.