Practice Assessment

Practice provides practice and allows you to self-reflect on your conceptual understanding of the *Lesson* skills. Your will mark your work for *Practice* in each *Workbook* according to the following rubric.

Category	Strategy and Procedures	Response to Questions
	I have…	*I have…*
4	• used efficient and effective strategies to solve the problem(s)	• provided detailed explanations and followed directions appropriately to complete all questions
3	• used effective strategies to solve the problem(s)	• provided clear explanations and followed directions adequately to complete most questions
2	• used effective strategies inconsistently to solve the problem(s)	• provided incomplete explanations and followed some directions to complete a few questions
1	• used ineffective strategies to solve the problem(s)	• provided incomplete explanations and have not followed directions to complete some questions

Complete *Practice* exercises using your best work, showing all relevant steps needed to arrive at your solution. Refer to the *Module* to review lesson instructions. Contact your teacher for assistance or clarification as needed, or to investigate the topic further.

Check and correct your work using the solutions provided in *Appendix* in the *Module*.

Practice is worth 8 marks.

After you have assessed your work, reflect on your understanding of the concepts addressed in the *Practice* exercises in the table provided.

Lesson 5.1: Polynomial Multiplication

Complete the *Practice* below. When you have completed all the questions for *Lesson 5.1 Practice – I* 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 – I

1. Show the multiplication of $(2x-3)(x+2)$ using algebra tiles and symbolically. Show how the steps of the two methods correspond.

Algebra Tiles	Symbolically

2. Expand and simplify, if possible.

   a. $(1-x)(2-y)$

   b. $(n-r)(p+q)$

   c. $(3-x)^2$

   d. $(-z^2-3z+2)(1-z)$

3. Alex was asked to multiply two binomials: $(6d + 2)(7d - 5)$

   His work is shown below.

$$(6d + 2)(7d - 5) = (6d)(7d) + (2)(-5)$$
$$= 42d^2 - 10$$

   a. Alex's work is not correct. What error did he make?

   b. Write a friendly recommendation to Alex explaining a strategy he could use to improve his solution. In your explanation, suggest how he could numerically verify the product.

4. After a book is bound, the three free edges are cut to give the book a clean finish. Suppose a book's pages have uncut dimensions of l and w, measured in centimetres. Write a binomial multiplication and its product to represent the finished area of a page if 0.75 cm is cut from each free edge.

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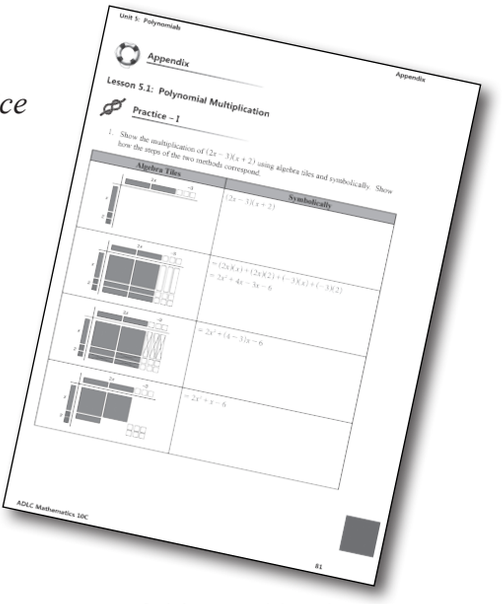
Mark your work for *Lesson 5.1 Practice – I* using the solutions provided in the *Appendix*. Then, apply the rubric found at the beginning of the *Workbook*.

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

My self-assessed mark on *Lesson 5.1 Practice – I* is _____.

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


Unit 5: Polynomials

Appendix

Appendix

Lesson 5.1: Polynomial Multiplication

Practice – I

1. Show the multiplication of $(2x - 3)(x + 2)$ using algebra tiles and symbolically. Show how the steps of the two methods correspond.

Algebra Tiles | Symbolically

$(2x - 3)(x + 2)$

$= (2x)(x) + (2x)(2) + (-3)(x) + (-3)(2)$

$= 2x^2 + 4x - 3x - 6$

$= 2x^2 + (4 - 3)x - 6$

$= 2x^2 + x - 6$

ADLC Mathematics 10C

81

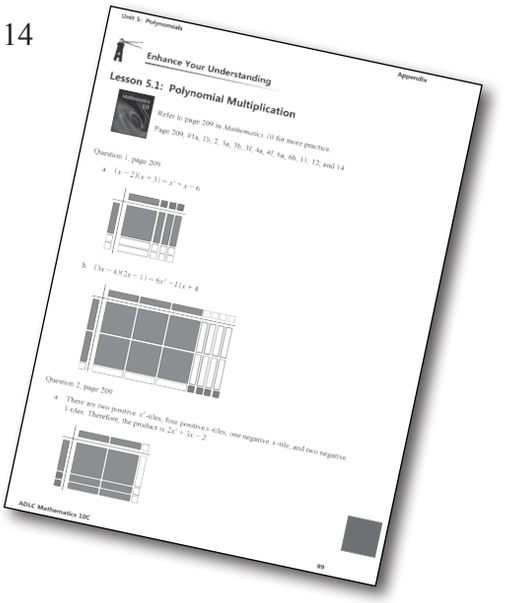
Question Number	Got it!	Almost there…	Need to retry or ask for help.
1			
2			
3			
4			

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 *Mathematics 10*.

- Page 209, #1a, 1b, 2, 3a, 3b, 3f, 4a, 4f, 6a, 6b, 11, 12, and 14

Check your work in *Enhance Your Understanding*.


Unit 5: Polynomials

Enhance Your Understanding

Appendix

Lesson 5.1: Polynomial Multiplication

Refer to page 209 in *Mathematics 10* for more practice.

Page 209, #1a, 1b, 2, 3a, 3b, 3f, 4a, 4f, 6a, 6b, 11, 12, and 14

Question 1, page 209

a. $(x - 2)(x + 3) = x^2 + x - 6$

b. $(3x - 4)(2x - 1) = 6x^2 - 11x + 4$

Question 2, page 209

a. There are two positive x^2-tiles, four positive x-tiles, one negative x-tile, and two negative 1-tiles. Therefore, the product is $2x^2 + 3x - 2$.

ADLC Mathematics 10C

99