Beginning Algebra Continued, Second Edition

Errata

These corrections apply only to copies of the Second Edition purchased prior to August 21, 2016.

Page 5

"You should know these number by heart." should be "You should know these numbers by heart.".

Page 8 Exercise 1.2.

Answer to #2h is $2^6\,3^3$.

Answer to #2j is $2^2 \cdot 3 \cdot 11$.

Page 13 Exercise 1.3.

Answer to #5 is $(90,234),(126,198)$.

Page 16 Exercise 1.4.

Answer to #3 is 56.

Page 17.

The last sentence of the first paragraph should read

"If all the prime factors of an integer N are included in $\{p_1, p_2, p_3, \cdots, p_n\}$, then the prime factors of a factor of N must belong to the set $\{p_1, p_2, p_3, \cdots, p_n\}$."

The sentence "Task 1: Choose some number of 2s. The are two ways to do this." should be "Task 1: Choose some number of 2s. There are two ways to do this."

The sentence "There are $2 \cdot 2 \cdot 2 = 6$ ways to complete the project." should be "There are $2 \cdot 2 \cdot 2 = 8$ ways to complete the project."

Page 29 Example 2.9.

"Find the slope and y-intercept of 2x+ 3y = 1" should be "Find the slope and y-intercept of 2x+ 3y = 6".

Page 31 Exercise 2.1.

The answer to #3 is $y+2 = -\frac{1}{7}(x+7)$ or $y+5 = -\frac{1}{7}(x-14)$

Question #4 should read is $(-3,15),(4,-6)$

The answer to #10 is $y = -\frac{1}{2}x + 7$

The answer to #12 is $y = -\frac{2}{3}x - 8$

The answer to #13 is $6x + y = 7$

Page 37 Exercise 2.2.

The answer to #3 is $3x + 5y = 20$

Page 46 Exercise 3.1.

The instruction preceding questions 20-26 should read "*Write the numbers whose square is the number given.*"

Page 48 Exercise 3.2.

The answer to #15 is 400.

Page 52 Example 3.13. Solution.

Number 3 should be $10\sqrt{5}$.

Page 56 Exercise 3.4.

The answer to #15 is 30.

Page 58.

The last sentence of the first paragraph should be "This is illustrated by Examples 3.28 to 3.33 on pages 58-59."

Page 63 Exercise 3.6.

The answer to #5 is $-9 + 3\sqrt{6}$.

Page 67 Definition 3.3.

The correct definition is

For any number a and n a positive integer, $b = \sqrt[n]{a}$ if $a = \underbrace{b \cdot b \cdot b \cdot b \cdot \cdots \cdot b}_{\text{n factors of } b.}$,

provided that when n is even, b is not negative. ■

Page 72 Exercise 3.9.

The first 10 problems should be replaced by the following

(1) $-2\sqrt{5} - 2\sqrt{3} - 2\sqrt{5}$

(2) $-\sqrt{2} + 2\sqrt{2} - 2\sqrt{2}$

(3) $2\sqrt[3]{4} + 2\sqrt[3]{-4} - 2\sqrt[3]{4}$

(4) $-2\sqrt{3}+2\sqrt{2}-\sqrt{2}$

(5) $2\sqrt[4]{2}+2\sqrt[4]{3}-2\sqrt[4]{3}$

(6) $2\sqrt{5}-\sqrt{5}+2\sqrt{3}$

(7) $-\sqrt[4]{3}-\sqrt[4]{3}-2\sqrt[4]{4}$

(8) $2\sqrt{2}-2\sqrt{2}+2\sqrt{3}$

(9) $2\sqrt{3}-\sqrt{3}-\sqrt{3}$

(10) $2\sqrt{3}+2\sqrt{3}+2\sqrt{3}$

Page 72 Exercise 3.9.

The answers to the first 10 problems are

(1) $-4\sqrt{5}-2\sqrt{3}$

(2) $-\sqrt{2}$

(3) $-2\sqrt[3]{4}$

(4) $-2\sqrt{3}+\sqrt{2}$

(5) $2\sqrt[4]{2}$

(6) $\sqrt{5}+2\sqrt{3}$

(7) $-2\sqrt[4]{3}-2\sqrt[4]{4}$

(8) $2\sqrt{3}$

(9) 0

(10) $6\sqrt{3}$

Page 72 Exercise 3.9.

The answer to #47 is $\frac{\sqrt[6]{32}}{6}$.

Page 73 Example 3.50.

"The number 163 is not divisible by 2,3,5,7,11 or 13" should read "The number 163 is not divisible by 2,3,5,7, or 11"

Page 73. Last paragraph.

"because none of 2,3,5,7,11,13 are factors of 163." should read "because none of 2,3,5,7,11 are factors of 163."

Page 74 Exercise 3.10.
The answer to #3 is (a) $\{2,3,5,7\}$ (b) prime.
The answer to #4 is (a) $\{2,3,5,7,11,13\}$ (b) prime.

Page 77 Exercise 4.1.
The answer to #19 is $-3^4 \cdot 2^2 = -81 \cdot 4 = -324$.

Page 82.
The paragraph following Definition 4.3 should read

"Now that negative integer exponents have been defined, we extend the power rule to include them. Showing the product rule holds with exponent 0 is an exercise question. Thus $a^m a^n = a^{m+n}$ for any integers m and n."

Page 90 Exercise 4.5.
The answer to #2 is $\sqrt[3]{25}$.

Page 93 Exercise 4.6.
The answer to #2 is $\frac{1}{4}$.
The answer to #15 is x^{11}.

Page 95.
The second paragraph should read

"As candidates for exponents, we examined in turn zero, negative integers, then rational numbers. We may not have expected that zero, negative integers and rational numbers would serve as exponents. But they do."

Page 102
The equation in the second paragraph should be

$$x^2 + 9x + 20 = (x+4)(x+5).$$

Page 107 Exercise 5.2.
The answer to #8 is $(a+7)(a-6)$.
The answer to #18 is $(x+6)(x+8)$.

Page 111
The first sentence following Equation 5.4 should read "Now, imagine you are asked to factor the RHS of Equation 5.4."

Page 113 Example 5.27. Solution.

The first equation should be

$$3x^3 + 2y^3 + 2x^2y + 3xy^2 = 3x^3 + 3xy^2 + 2y^3 + 2x^2y.$$

Page 114 Exercise 5.4.
The answer to #28 is $(5x+6)(y+3)$.

Page 153 Exercise 7.3.
Question #6 should be $x^2 + \frac{2}{3}x + \_\_\_\_$.

Page 164 Example 7.28.
The question should be "Solve. $x^2 - 6x + 7$."

Page 165 Exercise 7.5.
Question #16 should be $4x^2 - 2x - 11 = 0$.

Page 170 Exercise 7.6.
Question #10 should be $5p^2 - 12 = -6p$.