

# Principles of Microeconomics for AP® Courses Release Notes 2016

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## Page Count Difference:

In the newest edition of *Principles of Microeconomics for AP® Courses*, there are 559 pages, as compared to 561 pages in the previous edition. This page count variation is due to padding and font size changes.

## Errata:

Below is a table containing submitted errata, and the resolutions that OpenStax has provided for this latest text. *Principles of Microeconomics for AP® Courses* has been updated to include current Federal Reserve Economic Data (FRED). See final item below.

Issue	Resolution	Severity
Answer Key, Chapter 3, Exercise 10: The first exercise after the section of chapter 3 on efficiency (the last section of that chapter) reads: Does a price ceiling increase or decrease the number of transactions in a market? Why? What about a price floor? The answer in the text reads as follows: Assuming that people obey the price ceiling, the market price will be above equilibrium, which means that Qd will be less than Qs. Firms can only sell what is demanded, so the number of transactions will fall to Qd. This is easy to see graphically. By analogous reasoning, with a price floor the market price will be below	Revise the answer to Exercise 10 as follows: Assuming that people obey the price ceiling, the market price will be below equilibrium, which means that Qd will be more than Qs. Buyers can only buy what is offered for sale, so the number of transactions will fall to Qs. This is easy to see graphically. By analogous reasoning, with a price floor the market price will be above the equilibrium price, so Qd will be less than Qs. Since the limit on transactions here is demand, the number of transactions	Major

<p>the equilibrium price, so Qd will be greater than Qs. Since the limit on transactions here is demand, the number of transactions will fall to Qd. Note that because both price floors and price ceilings reduce the number of transactions, social surplus is less. But that is, of course, wrong. The answer should read as follows: Assuming that people obey the price ceiling, the market price will be below equilibrium, which means that Qd will be more than Qs. Buyers can only buy what is offered for sale, so the number of transactions will fall to Qs. This is easy to see graphically. By analogous reasoning, with a price floor the market price will be above the equilibrium price, so Qd will be less than Qs. Since the limit on transactions here is demand, the number of transactions will fall to Qd. Note that because both price floors and price ceilings reduce the number of transactions, social surplus is less.</p>	<p>will fall to Qd. Note that because both price floors and price ceilings reduce the number of transactions, social surplus is less.</p>	
<p>Chapter 4: Introduction to Labor and Financial Markets: 1st paragraph of page (in Bring it Home box), last sentence: "... in the second half of this case at chapter's end..." -&gt; check English</p>	<p>Revise text as follows: "Our study of supply and demand will help us to analyze what might happen in the labor market for nursing and other healthcare professionals, as discussed in the second half of this case at the end of the chapter."</p>	<p>Typo</p>
<p>Answer Key, Chapter 5, Exercise 1: There is a typo in the answer key to the first self check question for chapter 5. The question is as follows: image: ch 5 first self check question (see attached file) The answer in the text for the last part of the</p>	<p>Revise the answer to Chapter 5 Exercise 1 as follows: % change in quantity = <math>((1600-1800)/1700)*100 = -11.76</math> % change in price = <math>((130-120)/125)*100 = 7.81</math> Elasticity of demand = -</p>	<p>Major</p>

<p>question -- the price elasticity of demand as we move from point G to point H -- is: image: textbook answer to first self check question (see attached file) But the answer should be: % change in quantity = <math>((1600-1800)/1700)*100 = -11.76</math> % change in price = <math>((130-120)/125)*100 = 8</math> Elasticity of demand = <math>-11.76/8 = -1.47</math> The demand curve is elastic in this interval. Note that the textbook authors follow the common practice of reporting the price elasticity of demand in its absolute value. However, it is a much better practice to report the price elasticity of demand as a negative number.</p>	<p><math>11.76/7.81 = -1.51</math> The demand curve is elastic in this interval.</p>	
<p>Chapter 12: Environmental Protection and Negative Externalities, Self Check Questions: There is an error in the answer to self-check problem chapter 12 number 10. The answer key gives marginal costs and benefits of cleaning up as follows. (self check 12.10 answer image) But most of these answers are just the numerator of the calculation (in thousands of dollars). The exception is the calculation of the marginal benefit of increasing the pollution cleanup from 8 million gallons to 12 million gallons; that is, the marginal benefit of reducing total emissions from 8 million to 4 million gallons. The correct marginal cost and benefit calculations are the following (in the form of a spreadsheet): (marginal benefits and marginal costs of clean-up image) The answer to part b is thus not quite right because of the error in the marginal benefit calculation. The optimal quantity of clean-up would be somewhat larger</p>	<p>Revise table for Self-Check Question 10 as follows: 10. Suppose a city releases 16 million gallons of raw sewage into a nearby lake. Table 12.8 shows... For 4 million gallons row, Total Benefits column should be 1650 (previously 1650). For 0 gallons row, Total Benefits column should be 1900 (previously 2000).</p>	<p>Minor</p>

<p>than 12 million gallons; that is, the optimal quantity of pollution emitted would be somewhat less than 4 million gallons.</p>		
<p>Chapter 12: Environmental Protection and Negative Externalities, Self Check Questions: There is a typo in the data for self check exercise chapter 12, number 11. Thank you, Keranda, for pointing this out to me. The question reads as follows: (self check 12.11 image) But the data should be the following: (corrected data image) The answer is right for the corrected data but wrong for the original data in the problem.</p>	<p>Revise table for Self-Check Question 11 as follows: 11. The state of Colorado requires oil and gas companies who use fracking techniques to return the land to its original condition after the oil and gas extractions. Table 12.9 shows... For 400 Land Restored row, Total Benefit column should be \$380 (previously \$480).</p>	<p>Minor</p>
<p>Chapter 7: The Structure of Costs in the Short Run: penultimate paragraph: To avoid confusion, the last sentence should be moved "up" as follows: "This is the pattern of diminishing marginal returns. AS A RESULT, THE TOTAL COSTS OF PRODUCTION WILL BEGIN TO RISE MORE RAPIDLY AS OUTPUT INCREASES. At some point, you may even see negative returns as additional barbers begin bumping elbows..." The capitalized sentence is inappropriate as last sentence as in the case of negative returns (described in the two sentences currently preceding the currently last sentence) there is no increase in output, as referred to in the currently last sentence.</p>	<p>Revise text as follows: This is the pattern of diminishing marginal returns. As a result, the total costs of production will begin to rise more rapidly as output increases." At some point, ..."</p>	<p>Minor</p>
<p>Chapter 10: Monopolistic Competition: 2nd line of 2nd paragraph: "... is shown in the figure at point V" -&gt; V should be replaced by Y</p>	<p>Revise text as follows: "...is shown in the figure at point Y"</p>	<p>Typo</p>
<p>Chapter 9: Monopoly, Section: How a Profit-Maximizing Monopoly Chooses</p>	<p>Revise table "Total Costs and Total Revenues of HealthPill"</p>	<p>Major</p>

<p>Output and Price, Subsection: Total Cost and Total Revenue for a Monopolist: in Table 9.2, profits in row 4 and 5 should be 800 and 500 respectively.</p>	<p>as follows: Profit column for row 4 should be 800 (previously 900). Profit column for row 5 should be 500 (previously 700).</p>	
<p>Chapter 9: Monopoly, Section: How a Profit-Maximizing Monopoly Chooses Output and Price, Subsection: Total Cost and Total Revenue for a Monopolist, last paragraph- first complete paragraph, last word should be 800, not 900. This results from corrections to Total Profits in Table 9.2.</p>	<p>Revise the last paragraph of subsection "Total Cost and Total Revenue for a Monopolist" to mention the highest profit as 800, not 900.</p>	<p>Minor</p>
<p>Chapter 9: Monopoly, Section: How a Profit-Maximizing Monopoly Chooses Output and Price, Subsection: Marginal Revenue and Marginal Cost for a Monopolist: Figure 9.5. first 2 points are mis-plotted. The points should be (2, 300) and (3, 400).</p>	<p>Revise the first figure in subsection "Marginal Revenue and Marginal Cost for a Monopolist" so that the first two points plotted for marginal cost are (2, 300) and (3, 400).</p>	<p>Minor</p>
<p>Chapter 9: Monopoly, Section: How a Profit-Maximizing Monopoly Chooses Output and Price, Subsection: Marginal Revenue and Marginal Cost for a Monopolist Row 6 Marginal Cost, Marginal Profit, and Total Profit should be 700, -500 and 0 respectively. Row 7 Marginal Cost and Marginal Profit should be 1,400 and - 1,400 respectively.</p>	<p>Revise Table "Marginal Revenue, Marginal Cost, Marginal and Total Profit" as follows: In row 6, Marginal Cost should be 700, Marginal Profit should be -500, and Total Profit should be 0 (previously 900, -700, -200). In row 7, Marginal Cost should be 1,400, and Marginal Profit should be - 1,400 (previously 1,200, - 1,200).</p>	<p>Major</p>
<p>Chapter 1: How Economists Use Theories and Models to Understand Economic Issues: The paragraph following "Link It Up" contains two typos: 1) "Studying economics teaches you to think in a different of way" -&gt; "of" should be deleted 2) last sentence of paragraph: "... first put forth by Adam Smith, in his book,</p>	<p>Revised text to remove "of" and fixed reference of link.</p>	<p>Typo</p>

Figure 1.3 The Wealth of Nations" -> "Figure 1.3" in wrong place		
Chapter 12: The Economics of Pollution: The meaning of Table 12.1 is unclear. 1) In the paragraph immediately preceding the table, the table is first described as listing "the emissions from each" user of energy. Similarly, the caption of the table reads "... Emissions from Fossil Fuels..." From the text, it appears though the table lists CHANGES IN emissions. 2) Why are there no numbers in the last two columns of the row "Power"? It leads to the entry (730) in the last column of the last row equalling the sum of the last column's entries, but being not equal to the sum of the last row's entries.	Revise text as follows: "Table 12.1 lists the change in carbon dioxide emissions by users of energy (from residential to industrial) according to the U.S. Energy Information Administration (EIA)."	Minor
Chapter 20: Protectionism: An Indirect Subsidy from Consumers to Producers: last line of page: "U.S. jobs in textiles and apparel fell from about 542,000 in 2007 to 541,000 in 2012, an 8% decline" There must be a typo somewhere (a decline of 1,000 does not correspond to 8%)	Revise text as follows: "The U.S. Bureau of Labor Statistics (BLS), estimated the number of U.S. jobs in textiles and apparel fell from 666,360 in 2007 to 385,240 in 2012, a 42% decline."	Typo
Update Figure 17.2 with current data from the FRED website.	Figure 17.2 Corporate Profits After Tax (Adjusted for Inventory and Capital Consumption) updated to include current data (up to 2015) from Federal Reserve Economic Data (FRED).	Minor