# **Principles of Microeconomics Release Notes 2016**

### **Publish Date:**

March 30, 2016

#### **Revision Number:**

ME-2014-003(03/16)-RS

## **Page Count Difference:**

In the newest edition of *Principles of Microeconomics*, there are 559 pages, as compared to 561 in the last edition. This page count variation is due to padding changes.

## Errata:

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

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

number of transactions will fall to	number of transactions,	
Qd. Note that because both price floors and price ceilings reduce the	social surplus is less.	
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.		
Chapter 6: Intertemporal Choices in	Agreed that there is a typo	Туро
Financial Capital Markets: the	here. This sentence should	
sentence "In fact, the amount in IRAs	read, "In fact, the amount of	
rose from \$239 billion in 1992 to \$3.7	IRAs rose from \$239 billion in	
billion in 2005" clearly holds the	1992 to \$3.7 trillion in 2005	
typo of "billion" instead of "million".	to over \$5 trillion in 2012, as	
	per the Investment Company	
	Institute, a national	
	association of U.S.	
Chambar 12: The Francisc of	investment companies."	Time
Chapter 12: The Economics of Pollution: In figure 12.2, S {public} is	Revise figure label to read "Ssocial"	Туро
used. In the caption of the same	Social	
figure (and in the text on the same		
page), the same supply curve is		
referred to as S_{social}.		
Chapter 4: Introduction to Labor and	Revise text as follows: "Our	Туро
Financial Markets: 1st paragraph of	study of supply and demand	, · ·
page (in Bring it Home box), last	will help us to analyze what	

sentence: " in the second half of this case at chapter's end" -> check English  Chapter 7: Explicit and Implicit Costs, and Accounting and Economic Profit: 1st line of 1st centered question on page (in Work it Out box): "Economic	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." Added "t" to profit.	Туро
profi = total revenues - explicit costs - implicit costs": "t" is missing in "profit"		
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.	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,"	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."	Туро
Chapter 20: International Trade and Its Effects on Jobs, Wages, and	Removed comma.	Туро

Working Conditions: 1st paragraph following "Link It Up," 3rd last line: remove comma from "industry trade,."  Chapter 10: Monopolistic Competition: 2nd line of 2nd paragraph: " is shown in the figure at point V" -> V should be replaced	Revise text as follows: "is shown in the figure at point Y"	Туро
Appendix: The Use of Mathematics in Principles of Economics: A set of serious labelling errors has not yet been corrected in Appendix A of the economics textbooks. These errors appear in the following section of Appendix A. Solving Models with Graphs Erroneous Statement (errors in Red): The demand curve is then P = 8 – 5Qs and the demand curve is P = -0.4 + 2Qd Corrected Statement (corrections in Green): The demand curve is then P = 8 – 5Qd and the supply curve is P = -0.4 + 2Qs	Revise the text of Appendix A as follows: Algebraic Models Solving Models with Graphs "If algebra is not your forte, you can get the same answer by using graphsThe demand curve is then P = 8 - 0.5Qd and the supply curve is 0.4 + 02Qs." (Previous: The demand curve is then P = 8 0.5Qs and the demand curve is 0.4 + 02Qd)	Туро
Chapter 9: Monopoly, Section: How a Profit-Maximizing Monopoly Chooses 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.	Revise table "Total Costs and Total Revenues of HealthPill" as follows: Profit column for row 4 should be 800 (previously 900). Profit column for row 5 should be 500 (previously 700).	Major
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.	Revise the last paragraph of subsection "Total Cost and Total Revenue for a Monopolist" to mention the highest profit as 800, not 900.	Minor
Chapter 9: Monopoly, Section: How a Profit-Maximizing Monopoly Chooses Output and Price, Subsection:	Revise the first figure in subsection "Marginal Revenue and Marginal Cost	Minor

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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).	for a Monopolist" so that the first two points plotted for marginal cost are (2, 300) and (3, 400).	
Chapter 9: Monopoly, Section: How a Profit-Maximizing Monopoly Chooses Output and Price, Subsection: Marginal Revenue and Marginal Cost for a Monopolist: Table 9.3. Last column should be titled "Marginal Revenue," not "Total Revenue." Row 6 Total Cost, Marginal Cost, and Average Cost should be 4,200, 700 and 700 respectively. Row 7 Marginal Cost should be 1,400.	Revise table "Costs and Revenues of HealthPill" as follows: Last column on the right should be titled "Marginal Revenue" (previously Total Revenue). For row 6, Total Cost should be 4,200, Marginal Cost should be 700, and Average Cost should be 700 (previously 4,400, 900, 733). For row 7, Marginal Cost should be 1,400 (previously 1,200).	Major
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.	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).	Major
Chapter 33: What Happens When a Country Has an Absolute Advantage in All Goods: sentence starting end of second-last line of page: "But good students of Ricardo": "But" should be deleted	Revise sentence as follows: "Good students of Ricardo understand that trade is about mutually beneficial exchange."	Туро
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	Revised text to remove "of"and fixed reference of link.	Туро

way" -> "of" should deleted 2) last sentence of paragraph: " first put forth by Adam Smith, in his book, Figure 1.3 The Wealth of Nations" -> "Figure 1.3" in wrong place		
Chapter 3: Changes in Equilibrium Price and Quantity: The Four-Step Process: , there is a mistake on page 62 in the example steps Here, the book describes the four steps to view the shift in supply and It looks like the example steps 1-4 where pasted from the earlier example about the decline of print news readership. In steps one and two, the book refers to the postal service, but in step 3 it refers to news sources	Agreed. Replace step 3 so that it reads, "Step 3. Was the effect on supply positive or negative? Higher labor compensation leads to a lower quantity supplied of postal services at every given price, causing the supply curve for postal services to shift to the left, from S <subscript>0 to S<subscript>1."</subscript></subscript>	Minor
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
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 question the price elasticity of demand as we move from point G to	Revise the answer to Chapter 5 Exercise 1 as follows: % change in quantity = ((1600-1800)/1700)*100 = -11.76 % change in price = ((130-120)/125)*100 = 7.81 Elasticity of demand = -11.76/7.81 = -1.51 The demand curve is elastic in	Major

this interval. point H -- is: image: textbook answer to first self check question (see attached file) But the answer should be: % change in quantity = ((1600-1800)/1700)\*100 = -11.76 % change in price = ((130-(120)/(125)\*100 = 8 Elasticity of demand = -11.76/8 = -1.47 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. Revise table for Self-Check Chapter 12: Environmental Minor Protection and Negative Externalities, Question 10 as follows: 10. Self Check Questions: There is an Suppose a city releases 16 error in the answer to self-check million gallons of raw sewage problem chapter 12 number 10. The into a nearby lake. Table 12.8 answer key gives marginal costs and shows... For 4 million benefits of cleaning up as follows. gallons row, Total Benefits (self check 12.10 answer image) But column should be 1650 (previously 1650). For 0 most of these answers are just the numerator of the calculation (in gallons row, Total Benefits thousands of dollars). The exception column should be 1900 is the calculation of the marginal (previously 2000). 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 cleanup 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 than 12 million gallons; that is, the optimal quantity of pollution emitted

would be somewhat less than 4		
million gallons.		
Chapter 12: Environmental	Revise table for Self-Check	Minor
Protection and Negative Externalities,	Question 11 as follows: 11.	
Self Check Questions: There is a typo	The state of Colorado	
in the data for self check exercise	requires oil and gas	
chapter 12, number 11. Thank you,	companies who use fracking	
Keranda, for pointing this out to me.	techniques to return the land	
The question reads as follows: (self	to its original condition after	
check 12.11 image) But the data	the oil and gas extractions.	
should be the following: (corrected	Table 12.9 shows For 400	
data image) The answer is right for	Land Restored row, Total	
the corrected data but wrong for the	Benefit column should be	
original data in the problem.	\$380 (previously \$480).	
Update Figure 17.2 with current data	Figure 17.2 Corporate Profits	Minor
from the FRED website.	After Tax (Adjusted for	
	Inventory and Capital	
	Consumption) updated to	
	include current data (up to	
	2015) from Federal Reserve	
	Economic Data (FRED).	