

**Dimensions Mathematics Core Edition 7B**  
**Teaching Notes and Solutions**  
 (Updated 10/16/2014)

Page					
13	Class Activity 1	2(e)		$a_5 = 9$	
14	Class Activity 2	1(a)		There should be an H attached at the end of the second carbon compound.	
20	Ex. 9.1	4(d)	Solution	$T_7 = - - \frac{256}{9} \times \left( -\frac{2}{3} \right)$	
37	Ex. 10.2	7(c)	Solution	This is mislabeled as (b).	
43	Rev. Ex. 10	5(a)	Solution	Remove lines BD and AC.	
44		7(c)	Solution	...rate \$0.40/mile after... (remove s from miles)	
50	Ex. 11.1	2(c)	Solution	$x \leq 1\frac{1}{2}$	
51		3(c)	Solution	Second line: $\frac{8}{5} \times \left( \frac{5}{8} \cdot x \right) < \frac{8}{5} \times \left( -\frac{15}{4} \right)$	
52		7	Solution	$x > \frac{1}{5} \times 35$	
		8	Solution	$x \leq \frac{1}{8} \times (-6)$	
57	Ex. 11.4	10	Question	Find the number of months Rachael has to be...	
			Solution	$164 - 7m < 128$	
		11	Solution	$y \leq 26\frac{8}{17}$	
58	Rev. Ex. 11	2(b)	Solution	First line: $a < 7$	
59		3	Solution	The solutions should be shown on a number line.	
		4(a)	Solution	Second line $x \leq \frac{1}{8} \times 32$	
		6(a)	Solution	$3(5 - 4) + 2(x + 6) = 15 - 12 + 2x + 12$ $= 17x$	
		6(b)	Solution	$3(5 - 4) + 2(x + 6) \geq -51$	
60		10	Question	...number of times she swam in the club...	
74	Ex. 12.2	3(b)	Solution	$= 63.55 \text{ cm}^2$	
76	Ex. 12.3	2	Question Solution	DF first row, fourth column of the table	
		2(b)	Solution	DE is 6 (third column, third row of table)	

79	Ex. 12.4	2	Question	$h$ first row, third column of table	
92	Try It	3(c)	Solution	Second line: $x = \sqrt[3]{360}$	
107	Rev. Ex. 13	7(d)(ii)	Solution	Volume of cabinet $= \frac{264,000}{1,000,000}$	
113	Try It	3(b)	Solution	Actual area of the bathroom = $2.4 \times 2$	
114	Try It	7(a)	Solution	Since $\frac{t}{w} = \frac{1}{15}$	
		7(c)	Solution	$\frac{t}{w} = \frac{1}{15}$	
		7(d)	Solution	His wages were \$525.	
		7(e)	Solution	When $w = 675$ , $675 = 15t$	
124	Ex. 14.3	4	Solution	4 <sup>th</sup> line: $\frac{12}{8} = \frac{q}{24}$	
130	Ex. 14.4	14(a)	Solution	$56 = \frac{k}{3^2}$	
145	Ex. 15.3	5(b)	Solution	Sum = 0 (Set A table, last line under Deviation from Mean)	
152	Ex 15.5	4(a)	Solution	...occurs most often, i.e., ...	
154	Rev. Ex. 15	8(a)	Solution	Total number of pets	
155		2(a)	Solution	The second value for the numbers on the line plot should be 11.6.	
156		7	Solution	The line "Median salary = \$3,000" is part of the solution for (c), and (d) should be in front of the next line.	
157		5(d)	Solution	The last value under Data Value in the chart for Supermarket A should be 5.2.	
158		9(a)	Solution	For the line where Group A's values are arranged in ascending order, the value 74 should instead be 70.	
		9(d)	Solution	6 <sup>th</sup> row up from the bottom should be: 70 11 11 Last row should be Sum = 0     Sum = 268	
159		9(d)	Solution	MAD for Group A = $\frac{268}{16} = 16.75$	
		9(e)	Solution	... from Group A differ from the mean (59 points) by 16.75 points ...	
163	Class activity 4	1(d)		The answers in (b) and (c) should be the same as or close to each other.	
		2(b)		The answers in for 2(a), 1(b) and 1(c) should be the same as or close to each other.	

174	Ex. 16.2	9(c)	Solution	There is no blue rose. P(a blue rose) = 0	
178	Ex. 16.3	2(b)	Solution	Delete the period at the end.	
181	Rev. Ex. 16	17(a)(ii)	Solution	P(last digit is a '9') = $\frac{100}{1,000}$	
201	Ex. 17.2	12(b)(i)	Solution	The outcomes of event B are (1, 1), (1, 2), (1, 3), ...	
		13(a)	Solution	Second to last line: $= \frac{4}{36} + \frac{6}{36}$	
205	Ex. 17.3	12(c)	Solution	Last line: $\frac{8}{105}$	
207	Ex. 17.4	6(a)	Solution	P(both cards are red) = $\frac{26}{52} + \frac{25}{51}$	
208		8	Question	If she selects one of the 10 tulip bulbs at random and plants it, find...	
209		15(a)	Solution	Let B stand for a black card...	