

Dimensions Mathematics 8B Textbook

Page	Ch.				08/22/2014 Added (mm/dd/yyyy)
9	8	3 rd P		In the following activity, we shall see how we can determine the ...	
		Class activity 4	2(a)	Change comma at end of sentence to a period.	
			2(b)	...in pass per square meter if the function is linear .	
19	5	Class Activity	1(a)(i)	Numbers in second row are incorrect. Leave them out or replace with 8, 4.5, 2, 0.5, 2, 4.5	02/05/2015
			1(a)(ii)	Numbers in second row are incorrect. Leave them out or replace with 8, 4.5, 2, 0, 2, 4.5, 8	02/05/2015
26		Try It	5	When David hits a soccer ball with his head, ...	
51	9	Rev. Ex. 9	6	After the goods were delivered at the second destination, ...	
83	11			The first paragraph is redundant.	
92		Try It	6(a)	Change comma at end of sentence to a period.	
97		Rev. Ex. 11	2(d)	Omit. The problem cannot be solved using knowledge students have currently been taught.	
			3(e)	Find the coordinates of the point where line AC cuts the y -axis.	10/24/2018
112	12	Ex. 12.1	13(a)	Add comma at the end.	
126		Example 13		Delete extra space in the word "Volume" in the third from last line of the solution.	
130				In figure of blue sphere, change centre to center . In third paragraph under B, insert space in last sentence, radius of .	
132		Example 14		Label the second part of the solution as (b) .	
138				In figure of blue sphere, change centre to center .	
141		Rev. Ex. 12	13	ABCD is a trapezoid , ...	
152	13	Ex. 13.1	5(c)	Find the percentage of students who obtained grade A or grade B.	
158		2 nd P		The diagram on the right shows a stacked bar graph which displays the number of ...	
160		Ex. 13.2	1(c)	Which snack foods were preferred ...	
			1(d)	Name the top three preferred snack foods among ...	
175		Ex. 13.3	2	... in one town from 200 6 to 201 4 .	
181		Rev. Ex. 13	5	... and US Dollars (USD) ...	
183	14			In box lower right: If the distance, s meters , traveled by a car ...	

188		Class Activity 1		The same figures are shown twice in this activity. Only one is needed.
			1(ii)	Change comma at the end to a period.
195		Ex. 14.3	5	Its vertical distance, h meters, from the ground ...
200		Speech bubble		Express other quantities in terms of this letter.
203		Ex. 14.5	13	The distance s meters traveled by
204			15	A tank holds 50 liters of water.
Answers				
Page				
208	Ex. 8.1	3	(a)	-0.6 L/h; 0.6 L of water leaves the container every hour.
			(c)	After 24 hours, no water is left.
		5	(a)(ii)	Yes; 15
		10	(b)	-9 °C/hr. The temperature of the tea drops by 9 °C every hour.
		11	(b)	Same y -intercept; y -intercept = -2 .
		13	(a)	y 70 100 130 160
			(b)	$y = 30x + 40$
			(d)	\$115
209	Ex. 8.2	8	(c)	11.25 m
	Rev. Ex. 8	1	(b)	Slope = 2; y -intercept = -1
		6	(c)	1.6, 4.4
		7	(c)	$(-2.5, 2.5)$ lies on the graph; $(0.5, 9.5)$ lies above the graph.
	Try It	3	(b)	08:45
		4	(c)(iii)	9:43 A.M.; 14.3 km away from P
		5	(a)	160 m
			(b)	(i) 8 m/s (ii) 16 m/s (iii) $11\frac{3}{7}$ m/s
210	Ex. 9.1	3		Delete the line: (i) 32 (ii) 50 (iii) 26.6
		4	(b)	(i) 32 (ii) 50 (iii) 26.6
		7	(c)	1 euro = US\$1.26
	Ex. 9.2	2	(b)	$13\frac{1}{3}$ km/h
		3	(a)	(i) $83\frac{1}{3}$ m/min (ii) $55\frac{5}{9}$ m/min
			(b)	$66\frac{2}{3}$ m/min
			(c)	Mrs. Brown traveled for 12 minutes at a uniform speed of $83\frac{1}{3}$ m/min to a place 1,000 m from her starting point P . She then returned to the starting point at a uniform speed of $55\frac{5}{9}$ m/min in 18 minutes.

		4	(c)(ii)	Alicia met John at a place 56 km from P , 1 hour 24 minutes after she had started her journey.																									
	Rev. Ex. 9	2	(c)	11 min																									
		3	(c)	2 P.M., Saturday																									
		4	(c)	10 km away																									
211	Ex. 10.2	3		$\angle ABC$ is a right angle. $\angle ADC$ is not a right angle.																									
		10	(b)	$OC = 300$ m, $OD = 220$ m																									
			(c)	372 m																									
	Ex. 10.3	7	(a)	17 m																									
	Rev. Ex. 10	9	(a)	21.9 miles																									
			(b)	25.8 miles																									
212	Ex. 11.1	5	(d)	17 units ²																									
	Ex. 11.2	10	(a)	slope of $PQ = \frac{1}{2}$, slope of $QR = -2$, slope of $RS = \frac{1}{2}$, slope of $SP = -2$																									
	Ex. 11.3	4	(b)	$y = -3x + 15$																									
			(e)	$y = \frac{1}{2}x - 3$																									
			(f)	$y = -\frac{1}{5}x - \frac{13}{5}$																									
		7	(b)	$y = \frac{3}{4}x - 3$																									
213	Rev. Ex. 11	3	(e)	$(0, \frac{11}{5})$																									
		9	(b)	$AB = \sqrt{160}$ units, $AD = \sqrt{40}$ units																									
		10	(a)	$B(a, a)$, $C(0, a)$, $P(1, 0)$, $Q(a, 1)$, $R(a - 1, a)$, $S(0, a - 1)$																									
	Try It	4	(b)	576 cm ³																									
214	Ex. 12.2	15	(d)	900 cm ³																									
	Ex. 12.4	1	(b)	Surface area = 28.3 ft ² , Volume = 14.1 ft ³																									
			(c)	Surface area = 1020 in. ² , Volume = 3050 in. ³																									
		3	(b)	442 in. ³																									
	Rev. Ex. 12	1	(c)	44.2 in. ²																									
		11	(c)	427																									
		13	(d)	7590 lb																									
216	Ex. 13.1	4	(a)	The percentages under Boys should be: 24%, 16%, 60%, 100% The percentages under Girls should be: 28%, 40%, 32%, 100%																									
		7	(c)	<table border="1"> <thead> <tr> <th>Students</th> <th>7th Grade</th> <th>8th Grade</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Country</td> <td>20%</td> <td>10%</td> <td>15%</td> </tr> <tr> <td>Hip Hop</td> <td>25%</td> <td>35%</td> <td>30%</td> </tr> <tr> <td>Jazz</td> <td>10%</td> <td>25%</td> <td>17.5%</td> </tr> <tr> <td>Rock</td> <td>45%</td> <td>30%</td> <td>37.5%</td> </tr> <tr> <td>Total</td> <td>100%</td> <td>100%</td> <td>100%</td> </tr> </tbody> </table>	Students	7 th Grade	8 th Grade	Total	Country	20%	10%	15%	Hip Hop	25%	35%	30%	Jazz	10%	25%	17.5%	Rock	45%	30%	37.5%	Total	100%	100%	100%	
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		8	(b)	Add % after each of the values in the table.																									

217		9	(b)	Value under Men for Watching TV should be 0.55 .																						
		11	(a)	<table border="1"> <thead> <tr> <th>Number of hours</th> <th>Tally</th> <th>Frequency</th> </tr> </thead> <tbody> <tr> <td>$0 < x \leq 3$</td> <td>### ### ///</td> <td>13</td> </tr> <tr> <td>$3 < x \leq 6$</td> <td>### //</td> <td>7</td> </tr> <tr> <td>$6 < x \leq 9$</td> <td>////</td> <td>4</td> </tr> <tr> <td>$9 < x \leq 12$</td> <td>///</td> <td>3</td> </tr> <tr> <td></td> <td>Total</td> <td>27</td> </tr> </tbody> </table>	Number of hours	Tally	Frequency	$0 < x \leq 3$	### ### ///	13	$3 < x \leq 6$	### //	7	$6 < x \leq 9$	////	4	$9 < x \leq 12$	///	3		Total	27				
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	Ex. 13.2	9	(d)	$45 < t \leq 50$																						
	Ex. 13.3	2	(b)	7.8 million																						
218		9	(b)	The data points are randomly scattered in a way that does not approximate a line.																						
			(c)	No, there is no correlation.																						
		12	(c)(i)	0.083																						
			(c)(ii)	$y = \frac{1}{12}x + 2$																						
	Try It	5	(b)	$\left(\frac{2}{5}\right)^2$																						
219		12		The value of y when x is 1 should be -2 .																						
		16		$x = 7.45$; 15.4 cm																						
	Ex. 14.3	2	(d)	$x = -1.89$, $x = 2.39$																						
220	Ex. 14.5	10		2:12 P.M.																						
	Rev. Ex. 14	10	(a)(iii)	420																						
		12	(c)	10.2 gallons																						