Dimensions Math Textbook 8A			
Page	Question or Section	Error	Date Added
12	Try It, 7	Evaluate the following.	
20	Ex. 1.5, 6(c)	The cosmos contains approximately 50 billion galaxies	
35	Rev. Ex. 1, 5(d)	This question is not appropriate since it involves quadratics which is covered later. Change to $a^{\frac{1}{2}}\left(a^{\frac{1}{2}}-a^{-\frac{1}{2}}\right)$	8/19/2014
35	Rev. Ex. 1, 5(d)	Solution is: $a^{\frac{1}{2}}\left(a^{\frac{1}{2}}-a^{-\frac{1}{2}}\right)=a^{\left(\frac{1}{2}+\frac{1}{2}\right)}-a^{\left(\frac{1}{2}-\frac{1}{2}\right)}$ $=a-1$	
67	Rev. Ex. 2, 9	The perimeter of the framework is 192 cm.	7/28/2014
81	Example 12(b) Solution	$121p^2-132pq+36q^2 = (11p)^2-2(11p)(6q)+(6q)^2$ $= (11p-6q)^2$	7/28/2014
91	Example 3	When p = –1 and q = 7, –1 + 3(7) = 20	7/28/2014
100	Ex 4.3, 7	The sum of the squares of three consecutive positive odd numbers is 251.	10/24/2015
102	Rev. Ex 6	The cost for paving the border of a square flower bed is $20 per meter.	7/28/2014
115	Top of page	$\left(\frac{3x}{x+2}\right)(x+2)=2(x+2)$	
127	Rev. Ex. 5, 7	Make the letter in the parentheses the subject of each of the given formulas.	7/28/2014
132	Reflections	The above pictures show the reflection of a child in a mirror, …	7/28/2014
152	Class Activity 5 (b)	Plot … on another sheet of graph paper.	7/28/2014
218	Example 20, Method 2	30° x n = 360°	7/28/2014
226	Ex. 11, 8	m = 3, n = 77; m = 7, n = 33; m = 11, n = 21	
227	Ex. 1.5, 5 (e)	3×10^{10}	8/19/2014
229	Ch. 2, Try I,t 12	$x=4\frac{22}{23}, y=2\frac{14}{23}$	
229	Ex. 2.1 , 13(a)	$4x-6y$ = 3,000	
229	Ex. 2.1 , 13(d)	x = 400, y = 100; x = 1,200, y = 300	
229	Ex. 2.3, 2(h)	$x=-1\frac{2}{3}; y=-2\frac{1}{3}$	
231	Ex. 3.3	$(1-6xy)^2$	
231	Ex. 3.3	Review Exercise 3	8/19/2014
232	Ex. 4.2, 4(b)	$-1\frac{1}{4}$ or 3	
232	Ex. 4.3, 10	8 m or 12 m	8/19/2014
235	Ex. 5.5, 8(f)	$n=\pm\sqrt{b^2-\frac{9S^4}{4a^2}}$	
235	Rev. Ex. 5, 9	(a) $x=c\sqrt{\frac{y^2-9}{y^2+9}}$ (b) $\sqrt{7}$, 2.65	
237	Rev. Ex 6, 10	R(–1, 2), S(–1, 0), T(3, 0)	
237	13 (b)	A_2(5, –2), B_2(13, 0), C_2(11, 4), D_2(7, 4)	
237	13 (c)	An enlargement about center (–3, 4) with a scale factor of 2.	

Dimensions Math Textbook 8A includes activities using The Geometer's Sketchpad, which is no longer available. We recommend using GoeGebra instead.

Dimensions Math Workbook 8A			
Page	Question or Section	Error	Date Added
11	Chapter 2, 21	She answered x questions correctly and y questions incorrectly.	2014
13	Chapter 2, 21	3 Expansion and Factorization of Algebraic Expressions	2014
46	Chapter 6, 25(b)(ii)	Hence, find the perimeter of the enlarged quadrilateral in meters.	2014
46	Chapter 6, 27	The coordinates of P and Q are (0, 2) and (0, 4) respectively. (a) Find, by construction on a sheet of graph paper, …	2014
47	Chapter 6, 29(f)	Describe a single transformation that will map $\Delta A_1B_1C_1$ directly to $\Delta A_3B_3C_3$.	2014
60	Chapter 7, 22	The diagram shows a rectangular box $ABDC$ resting…	2014
60	Chapter 7, 29	In the figure, O is the center of the circle…	2014
65	Chapter 1, 7(e)	6.75×10^{-3}	2014
65	Chapter 1, 22(b)	$\frac{8}{9}$	2014
67	Chapter 2, 24(b)	$6x + 10y = 7$	2014
67	Chapter 3, 2(g)	$4a^3 + 3a^2 + 2a - 15$	2014
67	Chapter 3, 9(i)	$4(5x + 4t)(5s - 4t)$	2014
67	Chapter 3, (j)	$3\left(\frac{3}{5}p + q\right)\left(\frac{3}{5}p - q\right)$	2014
67	Chapter 3, 18(c)	$(2p - q)^2$	2014
68	Chapter 3, 23(b)(ii)	$10\pi(3r + 8s)^2$ cm^2	2014
68	Chapter 3, 24	(a) 58 (b) 770	2014
68	Chapter 3, 25(b)(ii)	Vertical distance: 4 m; Time: 2 s	2014
68	Chapter 3, 26(b)(ii)	6 s	2014
68	Chapter 3, 27(a)(i)	$(2x - 3y)$ cm	2014
68	Chapter 4, 3(a)	$2(y + 2)(y + 4)$	2014
68	Chapter 4, (f)	$3(2p - 5)(3p + 1)$	2014
68	Chapter 4, 7(d)	$-1\frac{1}{3}$ or -7	2014
68	Chapter 4, (f)	$-2\frac{1}{2}$ or $\frac{2}{3}$	2014
68	Chapter 4, 11(b)	$(3b - 4)(b - 1)$	2014
68	Chapter 4, 12(b)	$(p - 3q)(p - 2q)$	2014
68	Chapter 4, 20(b)	Replace answer with (ii) 4	2014
68	Chapter 4, 21(b)(ii)	5 (delete part of the answer: or –2.4)	2014
69	Chapter 4, 22(b)	$(w - 1)^2(w + 2)$	2014
69	Chapter 4, 23(b)	Delete part of the answer: or –19, or 0	2014
69	Chapter 4, 24(b)	Delete part of the answer: or –1.9	2014
69	Chapter 4, 26(c)	(i) 3 cm (ii) 5 cm	2014
69	Chapter 5, 4(d)	$\frac{4ac - 3b}{a^2bc}$	2014
69	Chapter 5, (h)	$\frac{2n^2 + m^2}{4mn}$	2014
69	Chapter 5, 5(g)	15 or $11\frac{2}{7}$	2/15/2015
69	Chapter 5, 9(a)	$y = \frac{x}{3z + 2}$	
70	Chapter 5, 27(c)(ii)	Delete part of the answer: or $-41\frac{5}{11}$	
70	Chapter 5, 28(c)(ii)	Delete part of the answer: or –18.375	
71	Chapter 6, 14	Delete parts (c) and (d).	

71	Chapter 6, 22(a)	x = 8 cm, y = 5 cm, $m\angle z$ = 102°	
71	Chapter 6, 22(b)	$m\angle x$ = 25°, y = 4.55 cm, z = 13.2 cm	
71	Chapter 6, 22	Delete parts (c) and (d).	
71	Chapter 6, 29(c)(ii)	A_2(–5, 2), B_2(–8, 2), C_2(–6, –1)	
71	Chapter 6, (e)(ii)	A_4(–3, –2), B_4(–3, –5), C_4(0, –3)	
72	Chapter 7, 9(d)	125°	

Dimensions Math Workbook Solutions 8A			
Page	Question or Section	Error	Date Added
4	Chapter 1, 4(h)	Solution $\sqrt{80.5}\times\sqrt[3]{26.95}\div 53.5\approx\sqrt{81}\times\sqrt[3]{27}\div 54$	
9	Chapter 1, 43(c)(ii)	Solution 8,447 = 8,400 (correct to 2 sig. fig.)	
16	Chapter 2, 14(a)	Solution Substituting (3) in to (2), $\frac{3(36-9y)}{2}+5y=37$	
16	Chapter 2, 14(e)	Solution Substituting x = 11 into (3),	
18	Chapter 2, 16	Solution Substituting y = 9 into (3), x + 12(9) = 99 x + 108 = 99	
19	Chapter 2, 22(a)	Question She answered x questions correctly and y questions incorrectly.	
19	Chapter 3, 9(c)	Solution = 3(m + 2n)2	
27	Chapter 3, 22(c)(ii)	Solution (x + 100)2 – (x – 100)2 = 640	
27	Chapter 3, 23	Solution (a) (i) Diameter = 2(3r + 8s) cm Radius = (3r + 8s) cm Circumference = 2π x radius = 2π(3r + 8s) cm (ii) Area = π x radius^2 = π(3r + 8s)^2 cm^2 (b) (i) Height = 4(3r + 8s) cm Volume of prism = base area x height = π(3r + 8s)^2 x 4(3r + 8s) = 4π(3r + 8s)^3 cm^3 (ii) Total surface area of prism = 2 x base area + circumference x height = 2π(3r + 8s)^2 + 2π(3r + 8s) x 4(3r + 8s) = 2π(3r + 8s)^2 + 8π(3r + 8s)^2 = 10π(3r + 8s)^2 cm^2	
28	Chapter 3, 27(b)	Solution Since 2x > 3y, 2x – 3y > 0,	
28	Chapter 3, 28(a)(ii)	Solution 1 + x + x(1 + x) + x(1 + x)2 + x(1 + x)3	
29	Chapter 4, 1	The number for the first problem should be 1, not 6.	
29	Chapter 4, 1	The method for the solution shows the cross method which is in Extend your Learning at the end of the chapter in the textbook.	
30	Chapter 4, 2	The method for the solution shows the cross method which is in Extend your Learning at the end of the chapter in the textbook.	
30	Chapter 4, 3	The method for the solution shows the cross method which is in Extend your Learning at the end of the chapter in the textbook.	
30	Chapter 4, 3(f)	Solution In the last line of the cross method: 6p2	
34	Chapter 4, 22(b)	Solution Second to last line: (w – 1) (w – 1) (w + 2)	

36	Chapter 4, 26(a)	Solution If the bars on the diagram are shifted as shown, the area is unchanged. Area of shaded region = …	
36	Chapter 4, 26(c)	Solution $\therefore$ width of the vertical bars = 3 cm	
36	Chapter 4, 30	Question A car begins to drive from Town A to town B via an expressway at 9:00 AM. A van leaves from town B to town A via the same expressway at 9:17 AM.	
38	Chapter 5, 5(e) - (h)	Solution Delete (e). The problem is not in the workbook. Renumber the rest as (e) – (f).	
38	Chapter 5, 5(e)	Solution $14x^2 - 368x + 2370 = 0$ $7x^2 - 284x + 1185 = 0$ $(7x - 79)(x - 15) = 0$ $X = \frac{79}{7}$ or $x = 15$ $X = 11\frac{2}{7}$ or $x = 15$	2/25/2015
43	Chapter 5, 16(g)	Solution Delete (g). The problem is not in the workbook.	
43	Chapter 5, 16(h)	Solution Renumber (h) as (g). Second to last line: $= \frac{366 \pm \sqrt{145,924}}{34}$	
48	Chapter 5, 29(a)	Solution Area of ABC = Ares of ADEF – Area of …	
53	Chapter 6, 5(a)	Solution Revers labels for points A and B in copy of the figure. Reverse labels for points A'' and B'' in image for (ii)	
57	Chapter 6, 12	Solution Both parts are labeled (a). Change second (a) to (b).	
58	Chapter 6, 15(a)(i)	Solution By observation, (i) the equation of l1 is x = –1, (ii) the equation of l2 is y = 3.	
58	Chapter 6, 18	Question The points … are rotated about the origin to the points …	
60	Chapter 6, 22(a)	Solution $\therefore x = 2 \times 4$ $= 8$ cm … $\therefore y = 5$ cm	
60	Chapter 6, 23	Question Complete the angle mark for angle *NMX* in the diagram.	
60	Chapter 6, 23(b)(ii)	Solution $\frac{QX}{NX} = \frac{PX}{MX}$	
61	Chapter 6, 25(b)(ii)	Question Hence, find the perimeter of the enlarged quadrilateral in meters.	
61	Chapter 6, 27	Question The coordinates of P and Q are (0, 2) and (0, 4) respectively. (a) Find, by construction on a sheet of graph paper, …	
62	Chapter 6, 29(f)	Question Describe a single transformation that will map $\Delta A_1B_1C_1$ directly to $\Delta A_3B_3C_3$.	
62	Chapter 6, 29(f)	Solution The figure (d)(i) is incorrect. The points should be at $A_3(1, -10)$, $B_3(2, -10)$, $C_3(0, -7)$.	
62	Chapter 6, (c)(ii)	Solution A2(–5, 2), B2(–8, 2), C2(–6, –1)	
63	Chapter 6, 32(a)	Solution Third line from the bottom: = $\frac{1}{4} \times \frac{2}{5}$	
64	Chapter 6, 35(a)	Solution *ABCD* is translated to *PQRS* by –15 in the y-direction.	
65	Chapter 6, 36(c)	Solution Delete part (c). The question does not include a part (c).	
68	Chapter 7, 6	Question Find the unknown angles x and y.	

71	Chapter 7, 18(e)(f)	Question & Solution These parts are not in the workbook and so should be deleted.	
73	Chapter 7, 22	Question The diagram shows a rectangular box *ABDC* resting…	
75	Chapter 7, 27(b)	If the sum of the interior angles of a regular …	
76	Chapter 7, 29	Question In the figure, *O* is the center of the circle…	
76	Chapter 7, 29(c)	Solution Fifth line: $= 180° - \frac{1}{2}(m\angle AOB + m\angle AOE)$	

Dimensions Math Teaching Notes and Solutions 8A			
Page	Question or Section	Error	Date Added
17	Class Activity 7, 1(a)	Answer Last column: 0.666666667	
19	Try It 1.1, 3(b)	Solution Second line: $= \frac{c^{48}}{c^{30}}$ Last line: the = sign is in the wrong font.	
21	Try It 1.7, 10	Solution 79.5 – 3.21 x 29.52 = 80 – 3.2 x 30 (rounded to 2 sig. fig.) = 80 – 96 = –16	
26	Ex. 1.3, 3(c)	Solution $\frac{1}{\sqrt[5]{a}} = a^{-\frac{1}{5}}$	
26	Ex. 1.3, 4(c)	Solution $c^{-\frac{1}{4}} \div c^{\frac{1}{8}} = c^{-\frac{1}{4}-\frac{1}{8}}$	
26	Ex. 1.3, 4(e)	Solution $\left(e^{-3}f^{4}\right)^{-\frac{1}{2}} = e^{\frac{3}{2}}f^{-2}$	
27	Ex. 1.3, 5(a)	Solution Third line: $= a^{\frac{8}{3}}b^{-\frac{1}{6}}$	
27	Ex. 1.3, 5(f)	Solution $\left(36p^2q^4\right)^{\frac{1}{2}}\left(49p^{-\frac{1}{3}}q^4\right)^{-\frac{1}{2}} = \left(6pq^2\right)\left(7^{-1}p^{\frac{1}{6}}q^{-2}\right)$ $= \frac{6}{7}p^{1+\frac{1}{6}}q^{2-2}$ $= \frac{6}{7}p^{\frac{7}{6}}$	
27	Ex. 1.3, 5(g)	Solution Last line: $u^{\frac{1}{6}}$	
27	Ex. 1.3, 5(h)	Solution Second line: $= 4^{\frac{1}{3}}x^{-\frac{1}{9}}y^{\frac{1}{6}} + 32^{\frac{1}{3}}x^{-\frac{2}{3}}y^{-\frac{1}{6}}$	
30	Ex.1.5, 6(c)	Question The cosmos contains approximately 50 billion galaxies.	

30	Ex.1.5, 8	Solution $= (7.82 \times 10^8) \times (3.65 \times 10^2) \div (6.8 \times 10^9)$ $= \frac{7.82 \times 3.65}{6.8} \times 10^{8+2-9}$ $= 4.1975 \times 10^1$ 4.1975×10 kg of meat was consumed by each person in that year.	10/23/2014
33	Ex. 1.7, 1	Solution (a) $2{,}000 + 6{,}000 = 8{,}000$ (b) $50{,}000 - 20{,}000 = 30{,}000$ (c) $80 \times 30 = 2{,}400$ (d) $3{,}000 \div 20 = 150$ (e) $100 + 4 \times 30 = 100 + 120 + 220$ (f) $10 \times 5 \times 6 = 300$ (g) $40{,}000 \times 0.003 = 120$ (h) $2{,}000 \div 30 \div 3 \approx 22$ (i) $(20 - 5) \times 7 = 15 \times 7 = 105$ (j) $6^2 \div 4 = 36 \div 4 = 9$	
34	Ex. 1.7, 3 (d)	Solution Last two lines: = 8 x 25 = 200	8/30/2023
35	Rev. Ex. 1, 2(d)	Solution $\left(\frac{2}{3}\right)^3 \div \left(\frac{9}{4}\right)^{-2} = \frac{2^3}{3^3} \times \left(\frac{4}{9}\right)^{-2}$	
35	Rev. Ex. 1, 5(d)	Question Solution This question is not appropriate since it involves quadratics which is covered later. Change to $a^{\frac{1}{2}}\left(a^{\frac{1}{2}} - a^{-\frac{1}{2}}\right)$ Solution is: $a^{\frac{1}{2}}\left(a^{\frac{1}{2}} - a^{-\frac{1}{2}}\right) = a^{\left(\frac{1}{2}+\frac{1}{2}\right)} - a^{\left(\frac{1}{2}-\frac{1}{2}\right)}$ $= a - 1$	
55	Ex. 2.3, 1(e)	Solution Substituting y = 3 into (3),	
56	Ex. 2.3, 1(h)	Solution Incorrect font for fraction in the line: Substituting $y = \frac{1}{3}$ into (3),	
57	Ex. 2.3, 2(c)	Solution Last two lines: $= -\frac{3}{2}$ $\therefore x = -\frac{3}{2}$ and $y = -\frac{1}{2}$	
67	Rev. Ex. 2, 7	Solution Last sentence: The length and width of the rectangle are 17 in. and 11 in. respectively.	
68	Rev. Ex. 2, 11(b)	Question If the pair of equations has no unique solution, …	7/28/2014
76	Ex. 3.1, 10	Solution By comparing coefficients, we will get,	
82	Rev. Ex. 3, 4(b)	Solution $(4y - 5)^2 - (2 + 3y)(2 - 3y)$ $(4y^2 - 2(4y)(5) + 5^2) - (2^2 - 9y^2)$ $16y^2 - 40y + 25 - (4 - 9y^2)$ $16y^2 - 40y + 25 - 4 + 9y^2$ $25y^2 - 40y + 21$	
82	Rev. Ex. 3, 6(b)	Solution Add a final line: = (b + 4)2	

83	Rev.Ex. 3, 9	Solution $a^2-2ab+b^2=(a-b)^2$ $a^2+b^2=(a-b)^2+2ab$ $=71+2(4.5)$ $=71+9$ $=80$	
86	Try It 4.1, 3	Solution Consider $11x^2+6x+5=(11x+p)(x+q)$ $=11x2+11(q+p)x+pq$	
86	Try It 4.1, 5	Solution $\therefore x=-\frac{7}{3}$ or $-2\frac{1}{3}$	
88	Ex. 4.1, 4(c)	Solution Third line: $x^2+2(3)x+3^2$	
92	Ex.4.2, 7	Solution $x=-\frac{14}{5}$ (rejected)	
93	Ex. 4.3, 8	Solution Are of the triangle + 105 $\left(\frac{1}{2}\right)x(2x+1)=105$ $x^2+\frac{x}{2}=105$ $2x^2+x-210=0$ $(x-10)(2x+21)=0$ $\therefore x-10=0$ or $2x+21=0$ $x=10$ or $x=-\frac{21}{2}$ (rejected) Thus, the height of the triangle is 10 cm.	
94	Ex. 4.3, 14	Solution Missing (a) in front of first part of solution	
97	Rev. Ex. 4, 9	Question The cost for paving the border of a square flower bed is $20 per meter.	7/28/2014
100	Try It 5.4, 9	Solution Delete period at end of first line.	
105	Ex. 5.2, 3(b)	Solution Last two lines: $=-\frac{11+y}{a-y}$ $=\frac{11+y}{y-a}$	
106	Ex. 5.3, 1(b)	Solution LCM of 3pq, 4rq, 6pr = 12pqr	
106	Ex. 5.3, 1	Solution Second (c) should be (d).	
108	Ex. 5.3, 5(g)	Solution Last line: $=\frac{4p}{3(p-2)(p+9)}$	
109	Ex. 5.4, 1(a)	Solution Second line: $3a-1=8a+24$	
113	Ex. 5.4, 13(b)	Solution Thus, the possible prices per copy of the game are $75 and $85.	
113	Ex. 5.5, 2(b)	Solution When a = 5, m = 6, and T = 12,	
113	Ex. 5.5, 3(b)	Solution Last Three lines: $51x-170=21x+70$ $30x=240$ $x=8$	

116	Ex. 5.5, 8(f)	Solution Second line: $\frac{3S}{2a} = \sqrt{b^2 - n^2}$	
119	Rev. Ex. 5, 7	Question Make the letter in the parentheses the subject of each of the given formulas.	7/28/2014
130	Class Activity 7, 3	Answer …and the object figure is on the same side of…	
134	Try It, 9(a)	Solution $m\angle PQR = m\angle ABC$ $= 83^\circ$	
141	Ex. 6.2, 4(b)	Solution On the figure, change *P'* to *P1, Q'* to *Q1,* and *R'* to *R1.*	
143	Ex. 6.2, 10	Solution The points B' and C' need to be reversed.	
143	Ex. 6.2, 11	Solution Labels on y-axis should be –2 and –4 rather than –1 and –2.	
146	Ex. 6.3, 7(b)	Solution Second line: $\frac{x}{24} = \frac{x+6}{36}$	
148	Ex. 6.3, 11	Solution It is not necessary to have point F in the diagram. The question asks for the lengths of the sides of ΔDEC, not ΔDEF. In (a), remove F from the diagram. In (b), change the sentence to: If we mark the midpoints D and E of the sides AC and BC, then ΔDEC is similar to ΔABC. In ΔDEC, DE = 3 cm, EC = 2.5 cm, and CD = 2 cm.	
149	Ex. 6.4, 3(a)	Solution Second line: = $\frac{16+12}{16}$	
149	Ex. 6.4, 6	Solution On the figure, change P' to P1, Q' to Q1, and R' to R1.	
154	Rev. Ex.6, 4	Solution Since the corresponding sides…	
156	Rev. Ex.6, 13	Solution The figure for (a) is for both (a) and (b) solutions.	
163	Try It, 2	Solution Last line: $\therefore y = 85$	
167	Ex. 7.1, 1(C)	Solution First line: $m\angle f = m\angle BCF$ (alt $\angle$s, DE // CF)	
171	Ex. 7.2, 4(b)	Solution Delete "In ΔPQS,"	
171	Ex. 7.2, 4(c)	Solution Third line: = 34°	
173	Ex. 7.2, 9(a)	Solution 6. Select the two angle bisectors.	