## # Correct

	Multiply.		_		
1	9 x 10 =	23	3	73 x 1,000 =	
2	9 x 100 =	24	ŀ	60 x 10 =	
3	9 x 1,000 =	25	5	600 x 10 =	
4	8 x 10 =	26	5	600 x 100 =	
5	80 x 10 =	27	<u>,                                    </u>	65 x 100 =	
6	80 x 100 =	28	3	652 x 100 =	
7	80 x 1,000 =	29		342 x 100 =	
8	7 x 10 =	30		800 x 100 =	
9	70 x 10 =	31		800 x 1,000 =	
10	700 x 10 =	32	2	860 x 1,000 =	
11	700 x 100 =	33	3	867 x 1,000 =	
12	700 x 1,000 =	34	ŀ	492 x 1,000 =	
13	2 x 10 =	35	5	34 x 10 =	
14	30 x 10 =	36	3	629 x 10 =	
15	32 x 10 =	37	<u>,                                    </u>	94 x 100 =	
16	4 x 10 =	38	3	238 x 100 =	
17	50 x 10 =	39		47 x 1,000 =	
18	54 x 10 =	40		294 x 1,000 =	
19	37 x 10 =	41		174 x 100 =	
20	84 x 10 =	42	2	285 x 1,000 =	
21	84 x 100 =	43	3	951 x 100 =	
22	84 x 1,000 =	44	ŀ	129 x 1,000 =	

© Bill Davidson



Lesson 2: Date:

Estimate multi-digit products by rounding factors to a basic fact and using place value patterns. 7/4/13



В	Multiply.	Improvemer	nt #	Correct
1	8 x 10 =	23	37 x 1,000 =	
2	8 x 100 =	24	50 x 10 =	
3	8 x 1,000 =	25	500 x 10 =	
4	7 x 10 =	26	500 x 100 =	
5	70 x 10 =	27	56 x 100 =	
6	70 x 100 =	28	562 x 100 =	
7	70 x 1,000 =	29	432 x 100 =	
8	6 x 10 =	30	700 x 100 =	
9	60 x 10 =	31	700 x 1,000 =	
10	600 x 10 =	32	760 x 1,000 =	
11	600 x 100 =	33	765 x 1,000 =	
12	600 x 1,000 =	34	942 x 1,000 =	
13	3 x 10 =	35	74 x 10 =	
14	20 x 10 =	36	269 x 10 =	
15	23 x 10 =	37	49 x 100 =	
16	5 x 10 =	38	328 x 100 =	
17	40 x 10 =	39	37 x 1,000 =	
18	45 x 10 =	40	924 x 1,000 =	
19	73 x 10 =	41	147 x 100 =	
20	48 x 10 =	42	825 x 1,000 =	
21	48 x 100 =	43	651 x 100 =	
22	48 x 1,000 =	44	192 x 1,000 =	

© Bill Davidson



Lesson 2: Date:

Estimate multi-digit products by rounding factors to a basic fact and  $% \left( 1\right) =\left( 1\right) \left( 1$ using place value patterns. 7/4/13



Estimate and then multiply

	Estimate and then multiply	<i>1</i> .			
1	29 x 11 ≈	2	23	801 x 31 ≈	
2	29 x 21 ≈	2	24	803 x 31 ≈	
3	29 x 31 ≈	2	25	703 x 31 ≈	
4	23 x 12 ≈	2	26	43 x 34 ≈	
5	23 x 22 ≈		27	53 x 34 ≈	
6	23 x 32 ≈		28	53 x 31 ≈	
7	23 x 42 ≈		29	53 x 51 ≈	
8	37 x 13 ≈	3	30	93 x 31 ≈	
9	37 x 23 ≈	3	31	913 x 31 ≈	
10	36 x 24 ≈	3	32	73 x 31 ≈	
11	24 x 36 ≈	3	33	723 x 31 ≈	
12	43 x 11 ≈	3	34	78 x 34 ≈	
13	43 x 21 ≈	3	35	798 x 34 ≈	
14	403 x 21 ≈	3	36	62 x 33 ≈	
15	303 x 21 ≈	3	37	642 x 33 ≈	
16	203 x 21 ≈	3	38	374 x 64 ≈	
17	41 x 11 ≈	3	39	64 x 374 ≈	
18	41 x 21 ≈	4	40	740 x 36 ≈	
19	41 x 31 ≈	4	41	750 x 36 ≈	
20	401 x 31 ≈	4	42	65 x 680 ≈	
21	501 x 31 ≈	4	43	849 x 84 ≈	
22	601 x 31 ≈	4	44	85 x 849 ≈	

© Bill Davidson



Lesson 5: Date:

Connect visual models and the distributive property to partial products of the standard algorithm without renaming. 7/4/13



Solve.

	Solve.			
1	5 x 100 =	23	5000 - 50 =	
2	500 - 5 =	24	50 x 99 =	
3	5 x 99 =	25	80 x 100 =	
4	3 x 100 =	26	80 x 99 =	
5	300 - 3 =	27	60 x 100 =	
6	3 x 99 =	28	60 x 99 =	
7	2 x 100 =	29	11 x 100 =	
8	200 - 2 =	30	1100 - 11 =	
9	2 x 99 =	31	11 x 99 =	
10	6 x 100 =	32	21 x 100 =	
11	600 - 6 =	33	2100 - 21 =	
12	6 x 99 =	34	21 x 99 =	
13	4 x 100 =	35	31 x 100 =	
14	4 x 99 =	36	31 x 99 =	
15	7 x 100 =	37	71 x 100 =	
16	7 x 99 =	38	71 x 99 =	
17	9 x 100 =	39	42 x 100 =	
18	9 x 99 =	40	42 x 99 =	
19	8 x 100 =	41	53 x 99 =	
20	8 x 99 =	42	64 x 99 =	
21	5 x 100 =	43	75 x 99 =	
22	50 x 100 =	44	97 x 99 =	

© Bill Davidson



Lesson 6:

Date:

Connect area diagrams and the distributive property to partial products of the standard algorithm without renaming. 7/4/13



# Correct \_\_\_\_\_

	Multiply.			
1	2 x 10 =	23	33 x 20 =	
2	12 x 10 =	24	33 x 200 =	
3	12 x 100 =	25	24 x 10 =	
4	4 x 10 =	26	24 x 20 =	
5	34 x 10 =	27	24 x 100 =	
6	34 x 100 =	28	24 x 200 =	
7	7 x 10 =	29	23 x 30 =	
8	27 x 10 =	30	23 x 300 =	
9	27 x 100 =	31	71 x 2 =	
10	3 x 10 =	32	71 x 20 =	
11	3 x 2 =	33	14 x 2 =	
12	3 x 20 =	34	14 x 3 =	
13	13 x 10 =	35	14 x 30 =	
14	13 x 2 =	36	14 x 300 =	
15	13 x 20 =	37	82 x 20 =	
16	13 x 100 =	38	15 x 300 =	
17	13 x 200 =	39	71 x 600 =	
18	2 x 4 =	40	18 x 40 =	
19	22 x 4 =	41	75 x 30 =	
20	22 x 40 =	42	84 x 300 =	
21	22 x 400 =	43	87 x 60 =	
22	33 x 2 =	44	79 x 800 =	

© Bill Davidson



Lesson 7: Date:

Connect area diagrams and the distributive property to partial products of the standard algorithm with renaming. 7/4/13



В	Multiply.	Improvement	t#	Correct
1	3 x 10 =	23	44 x 20 =	
2	13 x 10 =	24	44 x 200 =	
3	13 x 100 =	25	42 x 10 =	
4	5 x 10 =	26	42 x 20 =	
5	35 x 10 =	27	42 x 100 =	
6	35 x 100 =	28	42 x 200 =	
7	8 x 10 =	29	32 x 30 =	
8	28 x 10 =	30	32 x 300 =	
9	28 x 100 =	31	81 x 2 =	
10	4 x 10 =	32	81 x 20 =	
11	4 x 2 =	33	13 x 3 =	
12	4 x 20 =	34	13 x 4 =	
13	14 x 10 =	35	13 x 40 =	
14	14 x 2 =	36	13 x 400 =	
15	14 x 20 =	37	72 x 30 =	
16	14 x 100 =	38	15 x 300 =	
17	14 x 200 =	39	81 x 600 =	
18	2 x 3 =	40	16 x 40 =	
19	22 x 3 =	41	65 x 30 =	
20	22 x 30 =	42	48 x 300 =	
21	22 x 300 =	43	89 x 60 =	
22	44 x 2 =	44	76 x 800 =	

© Bill Davidson



Lesson 7: Date:

Connect area diagrams and the distributive property to partial products of the standard algorithm with renaming. 7/4/13



# Correct \_\_\_\_\_

	Multiply.			
1	3 x 3 =	23	8 x 5 =	
2	0.3 x 3 =	24	0.8 x 5 =	
3	0.03 x 3 =	25	0.08 x 5 =	
4	3 x 2 =	26	0.06 x 5 =	
5	0.3 x 2 =	27	0.06 x 3 =	
6	0.03 x 2 =	28	0.6 x 5 =	
7	2 x 2 =	29	0.06 x 2 =	
8	0.2 x 2 =	30	0.06 x 7 =	
9	0.02 x 2 =	31	0.9 x 6 =	
10	5 x 3 =	32	0.06 x 9 =	
11	0.5 x 3 =	33	0.09 x 9 =	
12	0.05 x 3 =	34	0.8 x 8 =	
13	0.04 x 3 =	35	0.07 x 7 =	
14	0.4 x 3 =	36	0.6 x 6 =	
15	4 x 3 =	37	0.05 x 5 =	
16	5 x 5 =	38	0.6 x 8 =	
17	0.5 x 5 =	39	0.07 x 9 =	
18	0.05 x 5 =	40	0.8 x 3 =	
19	7 x 4 =	41	0.09 x 6 =	
20	0.7 x 4 =	42	0.5 x 7 =	
21	0.07 x 4 =	43	0.12 x 4 =	
22	0.9 x 4 =	44	0.12 x 9 =	

© Bill Davidson



Lesson 11:

Multiply decimal fractions by multi-digit whole numbers through conversion to a whole number problem and reasoning about the placement of the decimal. 7/4/13



2.C.18

В		Improve	mer	nt	#	Correct
	Multiply.					

	Multiply.			
1	2 x 2 =	23	6 x 5 =	
2	0.2 x 2 =	24	0.6 x 5 =	
3	0.02 x 2 =	25	0.06 x 5 =	
4	4 x 2 =	26	0.08 x 5 =	
5	0.4 x 2 =	27	0.08 x 3 =	
6	0.04 x 2 =	28	0.8 x 5 =	
7	3 x 3 =	29	0.08 x 2 =	
8	0.3 x 3 =	30	0.08 x 7 =	
9	0.03 x 3 =	31	0.9 x 8 =	
10	4 x 3 =	32	0.08 x 9 =	
11	0.4 x 3 =	33	0.9 x 9 =	
12	0.04 x 3 =	34	0.08 x 8 =	
13	0.05 x 3 =	35	0.7 x 7 =	
14	0.5 x 3 =	36	0.06 x 6 =	
15	5 x 3 =	37	0.5 x 5 =	
16	4 x 4 =	38	0.06 x 8 =	
17	0.4 x 4 =	39	0.7 x 9 =	
18	0.04 x 4 =	40	0.08 x 3 =	
19	8 x 4 =	41	0.9 x 6 =	
20	0.8 x 4 =	42	0.05 x 7 =	
21	0.08 x 4 =	43	0.12 x 6 =	
22	0.6 x 4 =	44	0.12 x 8 =	

© Bill Davidson



Lesson 11:

Multiply decimal fractions by multi-digit whole numbers through conversion to a whole number problem and reasoning about the placement of the decimal. 7/4/13



Write in feet and inches

# # Correct \_\_\_\_\_

2 13 3 14 4 15	in = in = in = in = in =	ft in ft in ft in ft in ft in	24 25 26	17 in = 24 in = 28 in = 36 in =	ft ft ft	in in in
3 14 4 15	in = in = in =	ft in	25 26	28 in =	ft	in
4 15	in = in =	ft in	26			
	in =			36 in =	ft	in
5 22		ft in	27			
	in =		27	45 in =	ft	in
6 20		ft in	28	48 in =	ft	in
7 24	in =	ft in	29	59 in =	ft	in
8 25	in =	ft in	30	60 in =	ft	in
9 26	in =	ft in	31	64 in =	ft	in
10 30	in =	ft in	32	68 in =	ft	in
11 34	in =	ft in	33	71 in =	ft	in
12 35	in =	ft in	34	73 in =	ft	in
13 36	in =	ft in	35	72 in =	ft	in
14 37	in =	ft in	36	80 in =	ft	in
15 46	in =	ft in	37	84 in =	ft	in
16 40	in =	ft in	38	90 in =	ft	in
17 48	in =	ft in	39	96 in =	ft	in
18 58	in =	ft in	40	100 in =	ft	in
19 49	in =	ft in	41	108 in =	ft	in
20 47	in =	ft in	42	117 in =	ft	in
21 50	in =	ft in	43	104 in =	ft	in
22 12	in =	ft in	44	93 in =	ft	in

© Bill Davidson



Lesson 15:

Date:

Solve two-step word problems involving measurement and multi-digit multiplication. 7/4/13



В	Write in feet and inches.		Improve	mer	nt	# Correct	
1	120 in =	ft	in	23	16 in =	ft	in
2	12 in =	ft	in	24	24 in =	ft	in
3	13 in =	ft	in	25	29 in =	ft	in
4	14 in =	ft	in	26	36 in =	ft	in
5	20 in =	ft	in	27	42 in =	ft	in
6	22 in =	ft	in	28	48 in =	ft	in
7	24 in =	ft	in	29	59 in =	ft	in
8	25 in =	ft	in	30	60 in =	ft	in
9	26 in =	ft	in	31	63 in =	ft	in
10	34 in =	ft	in	32	67 in =	ft	in
11	30 in =	ft	in	33	70 in =	ft	in
12	35 in =	ft	in	34	73 in =	ft	in
13	36 in =	ft	in	35	72 in =	ft	in
14	46 in =	ft	in	36	77 in =	ft	in
15	37 in =	ft	in	37	84 in =	ft	in
16	40 in =	ft	in	38	89 in =	ft	in
17	48 in =	ft	in	39	96 in =	ft	in
18	49 in =	ft	in	40	99 in =	ft	in
19	58 in =	ft	in	41	108 in =	ft	in
20	47 in =	ft	in	42	115 in =	ft	in
21	50 in =	ft	in	43	103 in =	ft	in
22	12 in =	ft	in	44	95 in =	ft	in

© Bill Davidson



Lesson 15:

Date:

Solve two-step word problems involving measurement and  $% \left( \mathbf{r}_{\mathbf{r}}^{\prime }\right) =\mathbf{r}_{\mathbf{r}}^{\prime }$ multi-digit multiplication. 7/4/13



# Correct \_\_\_\_

^	Divide.		# <b>Conect</b>
1	30 ÷ 10 =	23	480 ÷ 4 =
2	430 ÷ 10 =	24	480 ÷ 40 =
3	4,300 ÷ 10 =	25	6,300 ÷ 3 =
4	4,300 ÷ 100 =	26	6,300 ÷ 30 =
5	43,000 ÷ 100 =	27	6,300 ÷ 300 =
6	50 ÷ 10 =	28	8,400 ÷ 2 =
7	850 ÷ 10 =	29	8,400 ÷ 20 =
8	8,500 ÷ 10 =	30	8,400 ÷ 200 =
9	8,500 ÷ 100 =	31	96,000 ÷ 3 =
10	85,000 ÷ 100 =	32	96,000 ÷ 300 =
11	600 ÷ 10 =	33	96,000 ÷ 30 =
12	60 ÷ 3 =	34	900 ÷ 30 =
13	600 ÷ 30 =	35	1,200 ÷ 30 =
14	4,000 ÷ 100 =	36	1,290 ÷ 30 =
15	40 ÷ 2 =	37	1,800 ÷ 300 =
16	4,000 ÷ 200 =	38	8,000 ÷ 200 =
17	240 ÷ 10 =	39	12,000 ÷ 200 =
18	24 ÷ 2 =	40	12,800 ÷ 200 =
19	240 ÷ 20 =	41	2,240 ÷ 70 =
20	3,600 ÷ 100 =	42	18,400 ÷ 800 =
21	36 ÷ 3 =	43	21,600 ÷ 90 =
22	3,600 ÷ 300 =	44	25,200 ÷ 600 =

© Bill Davidson



Lesson 16: Date:

Use divide by 10 patterns for multi-digit whole number division. 7/4/13



Improvement \_\_\_\_ # Correct \_\_\_\_ В Divido

	Divide.							
1	20 ÷ 10 =	23	840 ÷ 4 =					
2	420 ÷ 10 =	24	840 ÷ 40 =					
3	4,200 ÷ 10 =	25	3,600 ÷ 3 =					
4	4,200 ÷ 100 =	26	3,600 ÷ 30 =					
5	42,000 ÷ 100 =	27	3,600 ÷ 300 =					
6	40 ÷ 10 =	28	4,800 ÷ 2 =					
7	840 ÷ 10 =	29	4,800 ÷ 20 =					
8	8,400 ÷ 10 =	30	4,800 ÷ 200 =					
9	8,400 ÷ 100 =	31	69,000 ÷ 3 =					
10	84,000 ÷ 100 =	32	69,000 ÷ 300 =					
11	900 ÷ 10 =	33	69,000 ÷ 30 =					
12	90 ÷ 3 =	34	800 ÷ 40 =					
13	900 ÷ 30 =	35	1,200 ÷ 40 =					
14	6,000 ÷ 100 =	36	1,280 ÷ 40 =					
15	60 ÷ 2 =	37	1,600 ÷ 400 =					
16	6,000 ÷ 200 =	38	8,000 ÷ 200 =					
17	240 ÷ 10 =	39	14,000 ÷ 200 =					
18	24 ÷ 2 =	40	14,600 ÷ 200 =					
19	240 ÷ 20 =	41	2,560 ÷ 80 =					
20	6,300 ÷ 100 =	42	16,100 ÷ 700 =					
21	63 ÷ 3 =	43	14,400 ÷ 60 =					
22	6,300 ÷ 300 =	44	37,800 ÷ 900 =					

© Bill Davidson



Lesson 16: Date:

Use divide by 10 patterns for multi-digit whole number division. 7/4/13



# Correct

А	Divide.			#	Correct
1	6 ÷ 10 =		23	25 ÷ 50 =	
2	6 ÷ 20 =		24	2.5 ÷ 50 =	-
3	6 ÷ 60 =		25	4.5 ÷ 50 =	
4	8 ÷ 10 =		26	4.5 ÷ 90 =	
5	8 ÷ 40 =		27	0.45 ÷ 90 =	-
6	8 ÷ 20 =		28	0.45 ÷ 50 =	-
7	4 ÷ 10 =		29	0.24 ÷ 60 =	-
8	4 ÷ 20 =		30	0.63 ÷ 90 =	-
9	4 ÷ 40 =	•	31	0.48 ÷ 80 =	-
10	9 ÷ 3 =	-	32	0.49 ÷ 70 =	-
11	9 ÷ 30 =		33	6 ÷ 30 =	-
12	12 ÷ 3 =	•	34	14 ÷ 70 =	-
13	12 ÷ 30 =	•	35	72 ÷ 90 =	-
14	12 ÷ 40 =		36	6.4 ÷ 80 =	-
15	12 ÷ 60 =		37	0.48 ÷ 40 =	-
16	12 ÷ 20 =	-	38	0.36 ÷ 30 =	-
17	15 ÷ 3 =		39	0.55 ÷ 50 =	-
18	15 ÷ 30 =		40	1.36 ÷ 40 =	
19	15 ÷ 50 =	•	41	2.04 ÷ 60 =	
20	18 ÷ 30 =	•	42	4.48 ÷ 70 =	
21	24 ÷ 30 =		43	6.16 ÷ 80 =	-
22	16 ÷ 40 =		44	5.22 ÷ 90 =	

© Bill Davidson



Lesson 28:

Date:

Solve division word problems involving multi-digit division with group size unknown and the number of groups unknown. 7/4/13



В	Divide.	Improveme	nt	# Correct
1	4 ÷ 10 =	. 23	25 ÷ 50 =	
2	4 ÷ 20 =	. 24	2.5 ÷ 50 =	-
3	4 ÷ 40 =	. 25	3.5 ÷ 50 =	
4	8 ÷ 10 =	. 26	3.5 ÷ 70 =	
5	8 ÷ 20 =	. 27	0.35 ÷ 70 =	· .
6	8 ÷ 40 =	. 28	0.35 ÷ 50 =	· .
7	9 ÷ 10 =	. 29	0.42 ÷ 60 =	<b>.</b> .
8	9 ÷ 30 =	. 30	0.54 ÷ 90 =	· .
9	9 ÷ 90 =	. 31	0.56 ÷ 80 =	<b>.</b> .
10	6 ÷ 2 =	. 32	0.63 ÷ 70 =	<b>.</b> .
11	6 ÷ 20 =	. 33	6 ÷ 30 =	
12	12 ÷ 2 =	. 34	18 ÷ 90 =	
13	12 ÷ 20 =	. 35	72 ÷ 80 =	
14	12 ÷ 30 =	. 36	4.8 ÷ 80 =	-
15	12 ÷ 40 =	. 37	0.36 ÷ 30 =	· .
16	12 ÷ 60 =	. 38	0.48 ÷ 40 =	<b>.</b> .
17	15 ÷ 5 =	. 39	0.65 ÷ 50 =	<b>.</b> .
18	15 ÷ 50 =	. 40	1.38 ÷ 30 =	· .
19	15 ÷ 30 =	. 41	2.64 ÷ 60 =	<b>.</b> .
20	21 ÷ 30 =	. 42	5.18 ÷ 70 =	<b>.</b> .
21	27 ÷ 30 =	. 43	6.96 ÷ 80 =	= .
22	36 ÷ 60 =	. 44	6.12 ÷ 90 =	<b>=</b> .

© Bill Davidson



Lesson 28:

Date:

Solve division word problems involving multi-digit division with group size unknown and the number of groups unknown. 7/4/13

