# Sprints for all Grade 3 Modules



## **Mathematics Curriculum**



**GRADE 3 • MODULE 1** 

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## **GRADE 3 • MODULE 1**

Properties of Multiplication and Division and Solving Problems with Units of 2–5 and 10

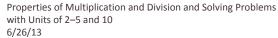
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# **SPRINTS**



Module 1:

Date:





i

# Correct

	Add or subtract.		_		
1	0 + 2 =	23	3	2 + 4 =	
2	2 + 2 =	24	ŀ	2 + 6 =	
3	4 + 2 =	25	5	2 + 8 =	
4	6 + 2 =	26	3	2 + 10 =	
5	8 + 2 =	27	<u>,                                    </u>	2 + 12 =	
6	10 + 2 =	28	3	2 + 14 =	
7	12 + 2 =	29		2 + 16 =	
8	14 + 2 =	30		2 + 18 =	
9	16 + 2 =	31		0 + 22 =	
10	18 + 2 =	32	2	22 + 22 =	
11	20 - 2 =	33	3	44 + 22 =	
12	18 - 2 =	34	ŀ	66 + 22 =	
13	16 - 2 =	35	5	88 - 22 =	
14	14 - 2 =	36	3	66 - 22 =	
15	12 - 2 =	37	<u> </u>	44 - 22 =	
16	10 - 2 =	38	3	22 - 22 =	
17	8 - 2 =	39		22 + 0 =	
18	6 - 2 =	40		22 + 22 =	
19	4 - 2 =	41		22 + 44 =	
20	2 - 2 =	42	2	66 + 22 =	
21	2 + 0 =	43	3	888 - 222 =	
22	2 + 2 =	44	ŀ	666 - 222 =	
		@ Dill David			



В	Add or subtract.	Improvemer	nt	# Correct		
1	2 + 0 =	23	4 + 2 =			
2	2 + 2 =	24	6 + 2 =			
3	2 + 4 =	25	8 + 2 =			
4	2 + 6 =	26	10 + 2 =			
5	2 + 8 =	27	12 + 2 =			
6	2 + 10 =	28	14 + 2 =			
7	2 + 12 =	29	16 + 2 =			
8	2 + 14 =	30	18 + 2 =			
9	2 + 16 =	31	0 + 22 =			
10	2 + 18 =	32	22 + 22 =			
11	20 - 2 =	33	22 + 44 =			
12	18 - 2 =	34	66 + 22 =			
13	16 - 2 =	35	88 - 22 =			
14	14 - 2 =	36	66 - 22 =			
15	12 - 2 =	37	44 - 22 =			
16	10 - 2 =	38	22 - 22 =			
17	8 - 2 =	39	22 + 0 =			
18	6 - 2 =	40	22 + 22 =			
19	4 - 2 =	41	22 + 44 =			
20	2 - 2 =	42	66 + 22 =			
21	0 + 2 =	43	666 - 222 =			
22	2 + 2 =	44	888 - 222 =			
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# Correct

^	Solve.		,, 30	cot
1	2 + 2 =	23	7 + 7 =	
2	2 twos =	24	2 sevens =	
3	5 + 5 =	25	9 + 9 =	
4	2 fives =	26	2 nines =	
5	2 + 2 + 2 =	27	8 + 8 =	
6	3 twos =	28	2 eights =	
7	2+2+2+2=	29	3 + 3 + 3 =	
8	4 twos =	30	3 threes =	
9	5 + 5 + 5 =	31	4 + 4 + 4 =	
10	3 fives =	32	3 fours =	
11	5 + 5 + 5 + 5 =	33	3 + 3 + 3 + 3 =	
12	4 fives =	34	4 threes =	
13	2 fours =	35	4 fives =	
14	4 + 4 =	36	4+4+4+4+4=	
15	2 threes =	37	3 sixes =	
16	3 + 3 =	38	6 + 6 + 6 =	
17	2 sixes =	39	3 eights =	
18	6 + 6 =	40	8 + 8 + 8 =	
19	5 twos =	41	3 sevens =	
20	2+2+2+2+2=	42	7 + 7 + 7 =	
21	5 fives =	43	3 nines =	
22	5 + 5 + 5 + 5 + 5 =	44	9 + 9 + 9 =	



В	Solve.	Improvemen	it # Corr	ect
1	5 + 5 =	23	8 + 8 =	
2	2 fives =	24	2 eights =	
3	2 + 2 =	25	7 + 7 =	
4	2 twos =	26	2 sevens =	
5	5 + 5 + 5 =	27	9 + 9 =	
6	3 fives =	28	2 nines =	
7	5 + 5 + 5 + 5 =	29	3 + 3 + 3 + 3 =	
8	4 fives =	30	4 threes =	
9	2 + 2 + 2 =	31	4 + 4 + 4 =	
10	3 twos =	32	3 fours =	
11	2 + 2 + 2 + 2 =	33	3 + 3 + 3 =	
12	4 twos =	34	3 threes =	
13	2 threes =	35	4 fives =	
14	3 + 3 =	36	4 + 4 + 4 + 4 + 4 =	
15	2 sixes =	37	3 sevens =	
16	6 + 6 =	38	7 + 7 + 7 =	
17	2 fours =	39	3 nines =	
18	4 + 4 =	40	9 + 9 + 9 =	
19	5 fives =	41	3 sixes =	
20	5 + 5 + 5 + 5 + 5 =	42	6 + 6 + 6 =	
21	5 twos =	43	3 eights =	
22	2 + 2 + 2 + 2 + 2 =	44	8 + 8 + 8 =	

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

Add or multiply.		# Correct
5 + 5 + 5 =	23	3 + 3 + 3 + 3 =
3 x 5 =	24	4 x 3 =
5 x 3 =	25	3 x 4 =
2 + 2 + 2 =	26	3 + 3 + 3 =
3 x 2 =	27	3 x 3 =
2 x 3 =	28	3+3+3+3+3=
5 + 5 =	29	5 x 3 =
2 x 5 =	30	3 x 5 =
5 x 2 =	31	7 + 7 =
2 + 2 + 2 + 2 =	32	2 x 7 =
4 x 2 =	33	7 x 2 =
2 x 4 =	34	9 + 9 =
2 + 2 + 2 + 2 + 2 =	35	2 x 9 =
5 x 2 =	36	9 x 2 =
2 x 5 =	37	6 + 6 =
3 + 3 =	38	6 x 2 =
2 x 3 =	39	2 x 6 =
3 x 2 =	40	8 + 8 =
5 + 5 + 5 + 5 =	41	2 x 8 =
4 x 5 =	42	8 x 2 =
5 x 4 =	43	7 + 7 + 7 + 7 =
2 x 2 =	44	4 x 7 =
	3 x 5 = 5 x 3 = 2 + 2 + 2 = 3 x 2 = 2 x 3 = 5 + 5 = 2 x 5 = 5 x 2 = 2 + 2 + 2 + 2 = 4 x 2 = 2 x 4 = 2 + 2 + 2 + 2 + 2 = 5 x 2 = 2 x 5 = 3 + 3 = 2 x 3 = 3 x 2 = 5 + 5 + 5 + 5 = 4 x 5 = 5 x 4 =	$5+5+5= 23$ $3 \times 5 = 24$ $5 \times 3 = 25$ $2+2+2= 26$ $3 \times 2 = 27$ $2 \times 3 = 28$ $5+5= 29$ $2 \times 5 = 30$ $5 \times 2 = 31$ $2+2+2+2= 32$ $4 \times 2 = 33$ $2 \times 4 = 34$ $2+2+2+2+2= 35$ $5 \times 2 = 36$ $2 \times 5 = 37$ $3+3= 38$

В	Add or multiply.	Improvemen	nt # Correct
1	2 + 2 + 2 =	23	4 + 4 + 4 =
2	3 x 2 =	24	3 x 4 =
3	2 x 3 =	25	4 x 3 =
4	5 + 5 + 5 =	26	4 + 4 + 4 + 4 =
5	3 x 5 =	27	4 x 4 =
6	5 x 3 =	28	4 + 4 + 4 + 4 + 4 =
7	2 + 2 + 2 + 2 =	29	4 x 5 =
8	4 x 2 =	30	5 x 4 =
9	2 x 4 =	31	6 + 6 =
10	5 + 5 =	32	6 x 2 =
11	2 x 5 =	33	2 x 6 =
12	5 x 2 =	34	8 + 8 =
13	3 + 3 =	35	2 x 8 =
14	2 x 3 =	36	8 x 2 =
15	3 x 2 =	37	7 + 7 =
16	2+2+2+2+2=	38	2 x 7 =
17	5 x 2 =	39	7 x 2 =
18	2 x 5 =	40	9 + 9 =
19	5 + 5 + 5 + 5 =	41	2 x 9 =
20	4 x 5 =	42	9 x 2 =
21	5 x 4 =	43	6+6+6+6=
22	2 x 2 =	44	4 x 6 =

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Date:



Lesson 10:

Date:

Model the distributive property with arrays to decompose units as a strategy to multiply. 5/6/13

# Correct \_\_\_\_

	Solve.		_		
1	2 x 2 =	23		x 2 = 20	
2	3 x 2 =	24		x 2 = 4	
3	4 x 2 =	25	<u>;</u>	x 2 = 6	
4	5 x 2 =	26	<u> </u>	20 ÷ 2 =	
5	1 x 2 =	27	<u>·</u>	10 ÷ 2 =	
6	4 ÷ 2 =	28	3	2 ÷ 2 =	
7	6 ÷ 2 =	29	<u> </u>	4 ÷ 2 =	
8	10 ÷ 2 =	30	1	6 ÷ 2 =	
9	2 ÷ 2 =	31	1	x 2 = 12	
10	8 ÷ 2 =	32	<u>:</u>	x 2 = 14	
11	6 x 2 =	33		x 2 = 18	
12	7 x 2 =	34		x 2 = 16	
13	8 x 2 =	35	<u>;</u>	14 ÷ 2 =	
14	9 x 2 =	36	<u>;</u>	18 ÷ 2 =	
15	10 x 2 =	37	<u> </u>	12 ÷ 2 =	
16	16 ÷ 2 =	38		16 ÷ 2 =	
17	14 ÷ 2 =	39	1	11 x 2 =	
18	18 ÷ 2 =	40	1	22 ÷ 2 =	
19	12 ÷ 2 =	41	$\perp$	12 x 2 =	
20	20 ÷ 2 =	42	<u>:</u>	24 ÷ 2 =	
21	x 2 = 10	43		14 x 2 =	
22	x 2 = 2	44		28 ÷ 2 =	

В	Solve.	Improvemer	nt	# Correct
1	1 x 2 =	23	x 2 = 4	
2	2 x 2 =	24	x 2 = 20	
3	3 x 2 =	25	x 2 = 6	
4	4 x 2 =	26	4 ÷ 2 =	
5	5 x 2 =	27	2 ÷ 2 =	
6	6 ÷ 2 =	28	20 ÷ 2 =	
7	4 ÷ 2 =	29	10 ÷ 2 =	
8	8 ÷ 2 =	30	6 ÷ 2 =	
9	2 ÷ 2 =	31	x 2 = 12	
10	10 ÷ 2 =	32	x 2 = 16	
11	10 x 2 =	33	x 2 = 18	
12	6 x 2 =	34	x 2 = 14	
13	7 x 2 =	35	16 ÷ 2 =	
14	8 x 2 =	36	18 ÷ 2 =	
15	9 x 2 =	37	12 ÷ 2 =	
16	14 ÷ 2 =	38	14 ÷ 2 =	
17	12 ÷ 2 =	39	11 x 2 =	
18	16 ÷ 2 =	40	22 ÷ 2 =	
19	20 ÷ 2 =	41	12 x 2 =	
20	18 ÷ 2 =	42	24 ÷ 2 =	
21	x 2 = 2	43	13 x 2 =	
22	x 2 = 10	44	26 ÷ 2 =	

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

Solve

	Solve.	 		
1	2 x 3 =	23	x 3 = 10	
2	3 x 3 =	24	x 3 = 6	
3	4 x 3 =	25	x 3 = 9	
4	5 x 3 =	26	30 ÷ 3 =	
5	1 x 3 =	27	15 ÷ 3 =	
6	6 ÷ 3 =	28	3 ÷ 3 =	
7	9 ÷ 3 =	29	6 ÷ 3 =	
8	15 ÷ 3 =	30	9 ÷ 3 =	
9	3 ÷ 3 =	31	x 3 = 18	
10	12 ÷ 3 =	32	x 3 = 21	
11	6 x 3 =	33	x 3 = 27	
12	7 x 3 =	34	x 3 = 24	
13	8 x 3 =	35	21 ÷ 3 =	
14	9 x 3 =	36	27 ÷ 3 =	
15	10 x 3 =	37	18 ÷ 3 =	
16	24 ÷ 3 =	38	24 ÷ 3 =	
17	21 ÷ 3 =	39	11 x 3 =	
18	27 ÷ 3 =	40	33 ÷ 3 =	
19	18 ÷ 3 =	41	12 x 3 =	
20	30 ÷ 3 =	42	36 ÷ 3 =	
21	x 3 = 15	43	13 x 3 =	
22	x 3 = 3	44	39 ÷ 3 =	



В	Solve.	Improvemer	nt	# Correct
1	1 x 3 =	23	x 3 = 6	
2	2 x 3 =	24	x 3 = 30	
3	3 x 3 =	25	x 3 = 9	
4	4 x 3 =	26	6 ÷ 3 =	
5	5 x 3 =	27	3 ÷ 3 =	
6	9 ÷ 3 =	28	30 ÷ 3 =	
7	6 ÷ 3 =	29	15 ÷ 3 =	
8	12 ÷ 3 =	30	9 ÷ 3 =	
9	3 ÷ 3 =	31	x 3 = 18	
10	15 ÷ 3 =	32	x 3 = 24	
11	10 x 3 =	33	x 3 = 27	
12	6 x 3 =	34	x 3 = 21	
13	7 x 3 =	35	24 ÷ 3 =	
14	8 x 3 =	36	27 ÷ 3 =	
15	9 x 3 =	37	18 ÷ 3 =	
16	21 ÷ 3 =	38	21 ÷ 3 =	
17	18 ÷ 3 =	39	11 x 3 =	
18	24 ÷ 3 =	40	33 ÷ 3 =	
19	30 ÷ 3 =	41	12 x 3 =	
20	27 ÷ 3 =	42	36 ÷ 3 =	
21	x 3 = 3	43	13 x 3 =	
22	x 3 =15	44	39 ÷ 3 =	



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1.E.30

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

	Multiply or divide.			
1	2 x 4 =	23	x 4 = 40	
2	3 x 4 =	24	x 4 = 8	
3	4 x 4 =	25	x 4 = 12	
4	5 x 4 =	26	40 ÷ 4 =	
5	1 x 4 =	27	20 ÷ 4 =	
6	8 ÷ 4 =	28	4 ÷ 4 =	
7	12 ÷ 4 =	29	8 ÷ 4 =	
8	20 ÷ 4 =	30	12 ÷ 4 =	
9	4 ÷ 4 =	31	x 4 = 24	
10	16 ÷ 4 =	32	x 4 = 28	
11	6 x 4 =	33	x 4 = 36	
12	7 x 4 =	34	x 4 = 32	
13	8 x 4 =	35	28 ÷ 4 =	
14	9 x 4 =	36	36 ÷ 4 =	
15	10 x 4 =	37	24 ÷ 4 =	
16	32 ÷ 4 =	38	32 ÷ 4 =	
17	28 ÷ 4 =	39	11 x 4 =	
18	36 ÷ 4 =	40	44 ÷ 4 =	
19	24 ÷ 4 =	41	12 ÷ 4 =	
20	40 ÷ 4 =	42	48 ÷ 4 =	
21	x 4 =20	43	14 x 4 =	
22	x 4 = 4	44	56 ÷ 4 =	
		© Dill Davida		

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Lesson 17: Date:

Model the relationship between multiplication and division. 5/6/13



В	Multply or divide.	Improvemer	nt	# Correct
1	1 x 4 =	23	x 4 = 8	
2	2 x 4 =	24	x 4 = 40	
3	3 x 4 =	25	x 4 = 12	
4	4 x 4 =	26	8 ÷ 4 =	
5	5 x 4 =	27	4 ÷ 4 =	
6	12 ÷ 4 =	28	40 ÷ 4 =	
7	8 ÷ 4 =	29	20 ÷ 4 =	
8	16 ÷ 4 =	30	12 ÷ 4 =	
9	4 ÷ 4 =	31	x 4 = 12	
10	20 ÷ 4 =	32	x 4 = 16	
11	10 x 4 =	33	x 4 = 36	
12	6 x 4 =	34	x 4 = 28	
13	7 x 4 =	35	32 ÷ 4 =	
14	8 x 4 =	36	36 ÷ 4 =	
15	9 x 4 =	37	24 ÷ 4 =	
16	28 ÷ 4 =	38	28 ÷ 4 =	
17	24 ÷ 4 =	39	11 x 4 =	
18	32 ÷ 4 =	40	44 ÷ 4 =	
19	40 ÷ 4 =	41	12 x 4 =	
20	36 ÷ 4 =	42	48 ÷ 4 =	
21	x 4 = 4	43	13 x 4 =	
22	x 4 = 20	44	52 ÷ 4 =	



Lesson 17: Date:

Model the relationship between multiplication and division. 5/6/13



Add or subtract.

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

	Add or subtract.			
1	0 + 5 =	23	10 + 5 =	
2	5 + 5 =	24	15 + 5 =	
3	10 + 5 =	25	20 + 5 =	
4	15 + 5 =	26	25 + 5 =	
5	20 + 5 =	27	30 + 5 =	
6	25 + 5 =	28	35 + 5 =	
7	30 + 5 =	29	40 + 5 =	
8	35 + 5 =	30	45 + 5 =	
9	40 + 5 =	31	0 + 50 =	
10	45 + 5 =	32	50 + 50 =	
11	50 - 5 =	33	50 + 5 =	
12	45 - 5 =	34	55 + 5 =	
13	40 - 5 =	35	60 - 5 =	
14	35 - 5 =	36	55 - 5 =	
15	30 - 5 =	37	60 + 5 =	
16	25 - 5 =	38	65 + 5 =	
17	20 - 5 =	39	70 - 5 =	
18	15 - 5 =	40	65 - 5 =	
19	10 - 5 =	41	100 + 50 =	
20	5 - 5 =	42	150 + 50 =	
21	5 + 0 =	43	200 - 50 =	
22	5 + 5 =	44	150 - 50 =	
		© Dill Davida		

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Lesson 18: Date:

Apply the distributive property to decompose units. 5/6/13

В	Add or subtract.	Improvemer	nt	# Correct
1	5 + 0 =	23	10 + 5 =	
2	5 + 5 =	24	15 + 5 =	
3	5 + 10 =	25	20 + 5 =	
4	5 + 15 =	26	25 + 5 =	
5	5 + 20 =	27	30 + 5 =	
6	5 + 25 =	28	35 + 5 =	
7	5 + 30 =	29	40 + 5 =	
8	5 + 35 =	30	45 + 5 =	
9	5 + 40 =	31	50 + 0	
10	5 + 45 =	32	50 + 50 =	
11	50 - 5 =	33	5 + 50 =	
12	45 - 5 =	34	5 + 55 =	
13	40 - 5 =	35	60 - 5 =	
14	35 - 5 =	36	55 - 5 =	
15	30 - 5 =	37	5 + 60 =	
16	25 - 5 =	38	5 + 65 =	
17	20 - 5 =	39	70 - 5 =	
18	15 - 5 =	40	65 - 5 =	
19	10 - 5 =	41	50 + 100 =	
20	5 - 5 =	42	50 + 150 =	
21	0 + 5 =	43	200 - 50 =	
22	5 + 5 =	Rill Davids	150 - 50 =	



Α	Fill in the blank			# Correct
1	Fill-in the blank. 0, 5,	23	35,, 45	
2	5, 10,	24		
3	10, 15,	25		
4	15, 20,	26	25,, 15	
5	20, 25,	27	50,, 40	
6	25, 30,	28	20,, 10	
7	30, 35,	29	45,, 35	
8	35, 40,	30	15,, 5	
9	40, 45,	31	40,, 30	
10	50, 45,	32	10,, 0	
11	45, 40,	33	35,, 25	
12	40, 35,	34	, 10, 5	
13	35, 30,	35	, 35, 30	
14	30, 25,	36	, 15, 10	
15	25, 20,	37	, 40, 35	
16	20, 15,	38	, 20, 15	
17	15, 10,	39	, 45, 40	
18	0,, 10	40	50, 55,	
19	25,, 35	41	45, 50,	
20	5,, 15	42	65,, 55	
21	30,, 40	43	55, 60,	
22	10,, 20	44	60, 65,	



В	Fill-in the blank.	Improvemer	nt	# Correct
1	5, 10,	23	15,, 25	
2	10, 15,	24	35,, 45	
3	15, 20,	25	30,, 20	
4	20, 25,	26	25,, 15	
5	25, 30,	27	50,, 40	
6	30, 35,	28	20,, 10	
7	35, 40,	29	45,, 35	
8	40, 45,	30	15,, 5	
9	50, 45,	31	35,, 25	
10	45, 40,	32	10,, 0	
11	40, 35,	33	35,, 25	
12	35, 30,	34	, 15, 10	
13	30, 25,	35	, 40, 35	
14	25, 20,	36	, 20, 15	
15	20, 15,	37	, 45, 40	
16	15, 10,	38	, 10, 5	
17	0,, 10	39	, 35, 30	
18	25,, 35	40	45, 50,	
19	5,, 15	41	50, 55,	
20	30,, 40	42	55, 60,	
21	10,, 20	43	65,, 55	
22	35,, 45	44	, 60, 55	



Lesson 20:



## **Mathematics Curriculum**



# **SPRINTS**

**GRADE 3 • MODULE 2** 

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## **GRADE 3 • MODULE 2**

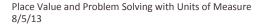
## Place Value and Problem Solving with Units of Measure

Module (	Overview	i
Topic A:	Time Measurement and Problem Solving	2.A.1
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Topic E:	Two- and Three-Digit Measurement Subtraction Using the Standard Algorithm	2.E.1
Module <i>i</i>	Assessments	2.S.1

## **SPRINTS**









#### # Correct Α

Write the number that is halfway between the two numbers.

	tile mannoci	that is hallway between the two i		J.	
1	0	10	23	280	290
2	10	20	24	580	590
3	20	30	25	590	580
4	70	80	26	30	40
5	80	70	27	930	940
6	40	50	28	70	60
7	50	40	29	470	460
8	30	40	30	90	100
9	40	30	31	890	900
10	70	60	32	990	1000
11	60	70	33	1000	1010
12	80	90	34	70	80
13	90	100	35	1070	1080
14	100	90	36	1570	1580
15	90	80	37	480	490
16	50	60	38	1480	1490
17	150	160	39	1080	1090
18	250	260	40	360	350
19	750	760	41	1790	1780
20	760	750	42	400	390
21	80	90	43	1840	1830
22	180	190	44	1110	1100

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Lesson 14: Date:

Round to the nearest hundred on the vertical number line. 7/4/13



E	3		Improvemer	nt		# Correct
ı	Write	the number that	is halfway between the two n	umbers	<b>5.</b>	
	1	10	20	23	270	280
	2	20	30	24	670	680
	3	30	40	25	680	670
	4	60	70	26	20	30
	5	70	60	27	920	930
	6	50	60	28	60	50
	7	60	50	29	460	450
	8	40	50	30	90	100
	9	50	40	31	890	900
	10	80	70	32	990	1000
	11	70	80	33	1000	1010
	12	80	90	34	20	30
	13	90	100	35	1020	1030
	14	100	90	36	1520	1530
	15	90	80	37	380	390
	16	60	70	38	1380	1390
	17	160	170	39	1080	1090
	18	260	270	40	760	750
	19	560	570	41	1690	1680
	20	570	560	42	300	290
	21	70	80	43	1850	1840
ľ						

180



22

Lesson 14: Date:

Round to the nearest hundred on the vertical number line. 7/4/13

1220



1210

44

170

# Correct \_\_\_\_ Round to the nearest ten.

	Round to the nearest te	n.		
1	21 ≈	23	79 ≈	
2	31 ≈	24	89 ≈	
3	41 ≈	25	99 ≈	
4	81 ≈	26	109 ≈	
5	59 ≈	27	119 ≈	
6	49 ≈	28	149 ≈	
7	39 ≈	29	311 ≈	
8	19 ≈	30	411 ≈	
9	36 ≈	31	519 ≈	
10	34 ≈	32	619 ≈	
11	56 ≈	33	629 ≈	
12	54 ≈	34	639 ≈	
13	77 ≈	35	669 ≈	
14	73 ≈	36	969 ≈	
15	68 ≈	37	979 ≈	
16	62 ≈	38	989 ≈	
17	25 ≈	39	999 ≈	
18	35 ≈	40	1109 ≈	
19	45 ≈	41	1119 ≈	
20	75 ≈	42	3227 ≈	
21	85 ≈	43	5487 ≈	
22	15 ≈	44	7885 ≈	

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Lesson 17:

Date:

Estimate sums by rounding and apply to solve measurement word problems. 7/5/13



В	Round to the nearest ten.	Improvemer	nt	# Correct
1	11 ≈	23	79 ≈	
2	21 ≈	24	89 ≈	
3	31 ≈	25	99 ≈	
4	71 ≈	26	109 ≈	
5	69 ≈	27	119 ≈	
6	59 ≈	28	159 ≈	
7	49 ≈	29	211 ≈	
8	19 ≈	30	311 ≈	
9	26 ≈	31	418 ≈	
10	24 ≈	32	518 ≈	
11	46 ≈	33	528 ≈	
12	44 ≈	34	538 ≈	
13	87 ≈	35	568 ≈	
14	83 ≈	36	968 ≈	
15	78 ≈	37	978 ≈	
16	72 ≈	38	988 ≈	
17	15 ≈	39	998 ≈	
18	25 ≈	40	1108 ≈	
19	35 ≈	41	1118 ≈	
20	75 ≈	42	2337 ≈	
21	85 ≈	43	4578 ≈	
22	45 ≈	44	8785 ≈	



Lesson 17:

Estimate sums by rounding and apply to solve measurement word problems. 7/5/13

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Round to the nearest hundred.

# Correct \_\_\_\_

	Round to the hearest h	I I	I	1
1	201 ≈	23	350 ≈	
2	301 ≈	24	1350 ≈	
3	401 ≈	25	450 ≈	
4	801 ≈	26	5450 ≈	
5	1801 ≈	27	850 ≈	
6	2801 ≈	28	6850 ≈	
7	3801 ≈	29	649 ≈	
8	7801 ≈	30	651 ≈	
9	290 ≈	31	691 ≈	
10	390 ≈	32	791 ≈	
11	490 ≈	33	891 ≈	
12	890 ≈	34	991 ≈	
13	1890 ≈	35	995 ≈	
14	2890 ≈	36	998 ≈	
15	3890 ≈	37	9998 ≈	
16	7890 ≈	38	7049 ≈	
17	512 ≈	39	4051 ≈	
18	2512 ≈	40	8350 ≈	
19	423 ≈	41	3572 ≈	
20	3423 ≈	42	9754 ≈	
21	677 ≈	43	2915 ≈	
22	4677 ≈	44	9996 ≈	

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Lesson 20:

Estimate differences by rounding and apply to solve measurement word problems. 7/5/13



В	Round to the nearest hundr	Improvemer	nt	# Correct
1	101 ≈	23	250 ≈	
2	201 ≈	24	1250 ≈	
3	301 ≈	25	350 ≈	
4	701 ≈	26	5350 ≈	
5	1701 ≈	27	750 ≈	
6	2701 ≈	28	6750 ≈	
7	3701 ≈	29	649 ≈	
8	8701 ≈	30	652 ≈	
9	190 ≈	31	692 ≈	
10	290 ≈	32	792 ≈	
11	390 ≈	33	892 ≈	
12	790 ≈	34	992 ≈	
13	1790 ≈	35	996 ≈	
14	2790 ≈	36	999 ≈	
15	3790 ≈	37	9999 ≈	
16	8790 ≈	38	4049 ≈	
17	412 ≈	39	2051 ≈	
18	2412 ≈	40	7350 ≈	
19	523 ≈	41	4572 ≈	
20	3523 ≈	42	8754 ≈	
21	877 ≈	43	3915 ≈	
22	4877 ≈	44	9997 ≈	



Lesson 20:

Estimate differences by rounding and apply to solve measurement word problems. 7/5/13





## **Mathematics Curriculum**



# **SPRINTS**

**GRADE 3 • MODULE 3** 

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## **GRADE 3 • MODULE 3**

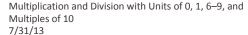
Multiplication and Division with Units of 0, 1, 6-9, and Multiples of 10

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# **SPRINTS**



Module 3: Date:





i

# Correct \_\_\_\_

	Multiply.		
1	2 x 1 =	23	2 x 7 =
2	2 x 2 =	24	5 x 5 =
3	2 x 3 =	25	5 x 6 =
4	4 x 1 =	26	5 x 7 =
5	4 x 2 =	27	4 x 5 =
6	4 x 3 =	28	4 x 6 =
7	1 x 6 =	29	4 x 7 =
8	2 x 6 =	30	3 x 5 =
9	1 x 8 =	31	3 x 6 =
10	2 x 8 =	32	3 x 7 =
11	3 x 1 =	33	2 x 7 =
12	3 x 2 =	34	2 x 8 =
13	3 x 3 =	35	2 x 9 =
14	5 x 1 =	36	5 x 7 =
15	5 x 2 =	37	5 x 8 =
16	5 x 3 =	38	5 x 9 =
17	1 x 7 =	39	4 x 7 =
18	2 x 7 =	40	4 x 8 =
19	1 x 9 =	41	4 x 9 =
20	2 x 9 =	42	3 x 7 =
21	2 x 5 =	43	3 x 8 =
22	2 x 6 =	44	3 x 9 =

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Lesson 1: Date:

Study commutativity to find known facts of 6, 7, 8, and 9. 7/31/13



В

Improvement

# Correct

	Multiply.	improvement	# Correct
1	5 x 1 =	23 5 x 7 =	=
2	5 x 2 =	24 2 x 5 =	=
3	5 x 3 =	25 2 x 6 =	=
4	3 x 1 =	26 2 x 7 =	=
5	3 x 2 =	27 3 x 5 =	=
6	3 x 3 =	28 3 x 6 =	=
7	1 x 7 =	29 3 x 7 =	=
8	2 x 7 =	30 4 x 5 =	=
9	1 x 9 =	31 4 x 6 =	=
10	2 x 9 =	32 4 x 7 =	=
11	2 x 1 =	33 5 x 7 =	=
12	2 x 2 =	34 5 x 8 =	=
13	2 x 3 =	35 5 x 9 =	=
14	4 x 1 =	36 2 x 7 =	=
15	4 x 2 =	37 2 x 8 =	=
16	4 x 3 =	38 2 x 9 =	=
17	1 x 6 =	39 3 x 7 =	=
18	2 x 6 =	40 3 x 8 =	=
19	1 x 8 =	41 3 x 9 =	=
20	2 x 8 =	42 4 x 7 =	=
21	5 x 5 =	43 4 x 8 =	=
22	5 x 6 =	44 4 x 9 =	=

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Lesson 1: Date:

Study commutativity to find known facts of 6, 7, 8, and 9. 7/31/13



# Correct

Α	Multiply.			# Correct
1	2 x 2 =	23	5 x 6 =	
2	2 x 3 =	24	6 x 5 =	
3	3 x 2 =	25	5 x 7 =	
4	2 x 4 =	26	7 x 5 =	
5	4 x 2 =	27	5 x 8 =	
6	2 x 5 =	28	8 x 5 =	
7	5 x 2 =	29	5 x 9 =	
8	2 x 6 =	30	9 x 5 =	
9	6 x 2 =	31	5 x 10 =	
10	2 x 7 =	32	10 x 5 =	
11	7 x 2 =	33	3 x 3 =	
12	2 x 8 =	34	3 x 4 =	
13	8 x 2 =	35	4 x 3 =	
14	2 x 9 =	36	3 x 6 =	
15	9 x 2 =	37	6 x 3 =	
16	2 x 10 =	38	3 x 7 =	
17	10 x 2 =	39	7 x 3 =	
18	5 x 3 =	40	3 x 8 =	
19	3 x 5 =	41	8 x 3 =	
20	5 x 4 =	42	3 x 9 =	
21	4 x 5 =	43	9 x 3 =	
22	5 x 5 =	44	4 x 4 =	

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Lesson 2:

Apply the distributive and commutative properties to relate multiplication facts  $5 \times n + n$  to  $6 \times n$  and  $n \times 6$  where n is the size of the unit.

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



Lesson 2:

Apply the distributive and commutative properties to relate multiplication facts  $5 \times n + n$  to  $6 \times n$  and  $n \times 6$  where n is the size of the unit.

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Lesson 5: Date:

Count by units of 7 to multiply and divide using number bonds to decompose. 7/31/13



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Lesson 6: Date:

Use the distributive property as a strategy to multiply and divide using units of 6 and 7. 7/31/13

## © Bill Davidson



Lesson 7: Date:

Interpret the unknown in multiplication and division to model and solve problems using units of 6 and 7. 7/31/13



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 $7 \times 6 =$ 



Lesson 8:

 $7 \times 7 =$ 

7/31/13

Understand the function of parenthesis and apply to solving problems.



 $7 \times 8 =$ 

## © Bill Davidson



Lesson 11: Date:

Interpret the unknown in multiplication and division to model and solve problems. 7/31/13



# © Bill Davidson



Lesson 12:

Apply the distributive property and the fact 9 = 10 - 1 as a strategy to multiply.

7/31/13



# Correct \_\_\_\_

	Multiply or divide.			
1	2 x 8 =	23	x 8 = 80	
2	3 x 8 =	24	x 8 = 32	
3	4 x 8 =	25	x 8 = 24	
4	5 x 8 =	26	80 ÷ 8 =	
5	1 x 8 =	27	40 ÷ 8 =	
6	16 ÷ 8 =	28	8 ÷ 1 =	
7	24 ÷ 8 =	29	16 ÷ 8 =	
8	40 ÷ 8 =	30	24 ÷ 8 =	
9	8 ÷ 1 =	31	x 8 = 48	
10	32 ÷ 8 =	32	x 8 = 56	
11	6 x 8 =	33	x 8 = 72	
12	7 x 8 =	34	x 8 = 64	
13	8 x 8 =	35	56 ÷ 8 =	
14	9 x 8 =	36	72 ÷ 8 =	
15	10 x 8 =	37	48 ÷ 8 =	
16	64 ÷ 8 =	38	64 ÷ 8 =	
17	56 ÷ 8 =	39	11 x 8 =	
18	72 ÷ 8 =	40	88 ÷ 8 =	
19	48 ÷ 8 =	41	12 x 8 =	
20	80 ÷ 8 =	42	96 ÷ 8 =	
21	x 8 = 40	43	14 x 8 =	
22	x 8 = 16	44	112 ÷ 8 =	

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Lesson 13: Date:

Identify and use arithmetic patterns to multiply. 7/31/13



В	Multiply or divide.	Improvemer	nt	# Correct
1	1 x 8 =	23	x 8 = 48	
2	2 x 8 =	24	x 8 = 80	
3	3 x 8 =	25	x 8 = 24	
4	4 x 8 =	26	16 ÷ 8 =	
5	5 x 8 =	27	8 ÷ 1 =	
6	24 ÷ 8 =	28	80 ÷ 8 =	
7	16 ÷ 8 =	29	40 ÷ 8 =	
8	32 ÷ 8 =	30	24 ÷ 8 =	
9	8 ÷ 1 =	31	x 8 = 64	
10	40 ÷ 8 =	32	x 8 = 32	
11	10 x 8 =	33	x 8 = 72	
12	6 x 8 =	34	x 8 = 56	
13	7 x 8 =	35	64 ÷ 8 =	
14	8 x 8 =	36	72 ÷8 =	
15	9 x 8 =	37	48 ÷ 8 =	
16	56 ÷ 8 =	38	56 ÷ 8 =	
17	48 ÷ 8 =	39	11 x 8 =	
18	64 ÷ 8 =	40	88 ÷ 8 =	
19	80 ÷ 8 =	41	12 x 8 =	
20	72 ÷8 =	42	96 ÷ 8 =	
21	x 8 = 16	43	13 x 8 =	
22	x 8 = 40	44	104 ÷ 8 =	



Lesson 13: Date:

Identify and use arithmetic patterns to multiply. 7/31/13



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Lesson 14: Date:

Identify and use arithmetic patterns to multiply. 7/31/13



# © Bill Davidson



Lesson 15:

Interpret the unknown in multiplication and division to model and solve problems. 7/31/13



Α

# Correct

<b>A</b>	Multiply or divide.		,	# Correct
1	2 x 9 =	23	x 9 = 90	
2	3 x 9 =	24	x 9 = 18	
3	4 x 9 =	25	x 9 = 27	
4	5 x 9 =	26	90 ÷ 9 =	
5	1 x 9 =	27	45 ÷ 9 =	
6	18 ÷ 9 =	28	9 ÷ 9 =	
7	27 ÷ 9 =	29	18 ÷ 9 =	
8	45 ÷ 9 =	30	27 ÷ 9 =	
9	9 ÷ 9 =	31	x 9 = 54	
10	36 ÷ 9 =	32	x 9 = 63	
11	6 x 9 =	33	x 9 = 81	
12	7 x 9 =	34	x 9 = 72	
13	8 x 9 =	35	63 ÷ 9 =	
14	9 x 9 =	36	81 ÷ 9 =	
15	10 x 9 =	37	54 ÷ 9 =	
16	72 ÷ 9 =	38	72 ÷ 9 =	
17	63 ÷ 9 =	39	11 x 9 =	
18	81 ÷ 9 =	40	99 ÷ 9 =	
19	54 ÷ 9 =	41	12 x 9 =	
20	90 ÷ 9 =	42	108 ÷ 9 =	
I				

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43

44



Lesson 16:

Date:

Reason about and explain arithmetic patterns using units of 0 and 1  $\,$ as they relate to multiplication and division. 7/31/13

 $14 \times 9 =$ 

 $126 \div 9 =$ 



x 9 = 45

x 9 = 9

В	<b>M</b> 10 1	Improvement	# Correct	
	Multiply or divide			

	Multiply or divide.			
1	1 x 9 =	23	x 9 = 18	
2	2 x 9 =	24	x 9 = 90	
3	3 x 9 =	25	x 9 = 27	
4	4 x 9 =	26	18 ÷ 9 =	
5	5 x 9 =	27	9 ÷ 9 =	
6	27 ÷ 9 =	28	90 ÷ 9 =	
7	18 ÷ 9 =	29	45 ÷ 9 =	
8	36 ÷ 9 =	30	27 ÷ 9 =	
9	9 ÷ 9 =	31	x 9 = 27	
10	45 ÷ 9 =	32	x 9 = 36	
11	10 x 9 =	33	x 9 = 81	
12	6 x 9 =	34	x 9 = 63	
13	7 x 9 =	35	72 ÷ 9 =	
14	8 x 9 =	36	81 ÷ 9 =	
15	9 x 9 =	37	54 ÷ 9 =	
16	63 ÷ 9 =	38	63 ÷ 9 =	
17	54 ÷ 9 =	39	11 x 9 =	
18	72 ÷ 9 =	40	99 ÷ 9 =	
19	90 ÷ 9 =	41	12 x 9 =	
20	81 ÷ 9 =	42	108 ÷ 9 =	
21	x 9 = 9	43	13 x 9 =	
22	x 9 = 45	 44	117 ÷ 9 =	



Lesson 16:

Date:

Reason about and explain arithmetic patterns using units of 0 and 1  $\,$ as they relate to multiplication and division. 7/31/13



Α

Complete the number sentence.

# Correct

	Complete the number sen	tence.		
1	x 1 = 2	23	9 ÷ = 9	
2	x 1 = 3	24	8 x = 8	
3	x 1 = 4	25	x 1 = 1	
4	x 1 = 9	26	0 ÷ 3 =	
5	8 x = 0	27	x 1 = 7	
6	9 x = 0	28	6 x = 0	
7	4 x = 0	29	4 x = 4	
8	5 x = 5	30	0 ÷ 8 =	
9	6 x = 6	31	0 x = 0	
10	7 x = 7	32	1 ÷ 1 =	
11	3 x = 3	33	x 1 = 24	
12	0 ÷ 1 =	34	17 x = 0	
13	0 ÷ 2 =	35	32 x = 32	
14	0 ÷ 3 =	36	0 ÷ 19 =	
15	0 ÷ 6 =	37	46 x = 0	
16	1 x = 1	38	0 ÷ 51 =	
17	4 ÷ = 4	39	64 x = 64	
18	5 ÷ = 5	40	x 1 = 79	
19	6 ÷ = 6	41	0 ÷ 82 =	
20	8 ÷ = 8	42	x 1 = 96	
21	x 1 = 5	43	27 x = 27	
22	3 x = 0	44	43 x = 0	

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Lesson 18: Date:

Solve two-step word problems involving all four operations and assess the reasonableness of solutions.



В	Complete the number sentence.	Improvemer	nt #	Correct
1	x 1 = 3	23	8 ÷ = 8	
2	x 1 = 4	24	7 x = 7	
3	x 1 = 5	25	x 1 = 1	
4	x 1 = 8	26	0 ÷ 5 =	
5	7 x = 0	27	x 1 = 9	
6	8 x = 0	28	5 x = 0	
7	3 x = 0	29	9 x = 9	
8	4 x = 4	30	0 ÷ 6 =	
9	5 x = 5	31	1 ÷ 1 =	
10	6 x = 6	32	0 x = 0	
11	2 x = 2	33	x 1 = 34	
12	0 ÷ 2 =	34	16 x = 0	
13	0 ÷ 3 =	35	31 x = 31	
14	0 ÷ 4 =	36	0 ÷ 18 =	
15	0 ÷ 7 =	37	45 x = 0	
16	1 x = 1	38	0 ÷ 52 =	
17	3 ÷ = 3	39	63 x = 63	
18	4 ÷ = 4	40	x 1 = 78	
19	5 ÷ = 5	41	0 ÷ 81 =	
20	7 ÷ = 7	42	x 1 = 97	
21	x 1 = 6	43	26 x = 26	



Lesson 18:

Date:

Solve two-step word problems involving all four operations and assess the reasonableness of solutions. 7/31/13

42 x \_\_\_

4 x

Δ

# Correct

Α	Multiply.			# Correct
1	2 x 3 =	23	8 x 40 =	
2	2 x 30 =	24	80 x 4 =	
3	20 x 3 =	25	9 x 6 =	
4	2 x 2 =	26	90 x 6 =	
5	2 x 20 =	27	2 x 5 =	
6	20 x 2 =	28	2 x 50 =	
7	4 x 2 =	29	3 x 90 =	
8	4 x 20 =	30	40 x 7 =	
9	40 x 2 =	31	5 x 40 =	
10	5 x 3 =	32	6 x 60 =	
11	50 x 3 =	33	70 x 6 =	
12	3 x 50 =	34	8 x 70 =	
13	4 x 4 =	35	80 x 6 =	
14	40 x 4 =	36	9 x 70 =	
15	4 x 40 =	37	50 x 6 =	
16	6 x 3 =	38	8 x 80 =	
17	6 x 30 =	39	9 x 80 =	
18	60 x 3 =	40	60 x 8 =	
19	7 x 5 =	41	70 x 7 =	
20	70 x 5 =	42	5 x 80 =	
21	7 x 50 =	43	60 x 9 =	
22	8 x 4 =	44	9 x 90 =	

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Lesson 21:

Date:

Solve two-step word problems involving multiplying single-digit factors and multiples of 10. 7/31/13



В	Multiply.	Improvemen	t # Correc	ct
1	4 x 2 =	23	9 x 40 =	
2	4 x 20 =	24	90 x 4 =	
3	40 x 2 =	25	8 x 6 =	
4	3 x 3 =	26	80 x 6 =	
5	3 x 30 =	27	5 x 2 =	
6	30 x 3 =	28	5 x 20 =	
7	3 x 2 =	29	3 x 80 =	
8	3 x 20 =	30	40 x 8 =	
9	30 x 2 =	31	4 x 50 =	
10	5 x 5 =	32	8 x 80 =	
11	50 x 5 =	33	90 x 6 =	
12	5 x 50 =	34	6 x 70 =	
13	4 x 3 =	35	60 x 6 =	
14	40 x 3 =	36	7 x 70 =	
15	4 x 30 =	37	60 x 5 =	
16	7 x 3 =	38	6 x 80 =	
17	7 x 30 =	39	7 x 80 =	
18	70 x 3 =	40	80 x 6 =	
19	6 x 4 =	41	90 x 7 =	
20	60 x 4 =	42	8 x 50 =	
21	6 x 40 =	43	80 x 9 =	
22	9 x 4 =	44	7 x 90 =	



Lesson 21: Date:

Solve two-step word problems involving multiplying single-digit factors and multiples of 10. 7/31/13





# **Mathematics Curriculum**



# **SPRINTS**

**GRADE 3 • MODULE 4** 

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# **SPRINTS**



Module 4: Date:

Multiplication and Area 10/1/13



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Lesson 2: Date:

Decompose and recompose shapes to compare areas. 9/30/13



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Lesson 8: Date:

Find the area of a rectangle through multiplication of the side lengths.



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Lesson 12: Date:

Solve word problems involving area. 9/30/13

## © Bill Davidson



Lesson 14:

Find areas by decomposing into rectangles or completing composite figures to form rectangles.



4.D.32

#### 9 x 4 = 9 x 5 = 9 x 2 = $9 \times 3 =$

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Lesson 15:

Date:

Apply knowledge of area to determine areas of rooms in a given floor

9/30/13



4.D.43

5

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Lesson 16:

Date:

Apply knowledge of area to determine areas of rooms in a given floor

9/30/13



# **Mathematics Curriculum**



# **SPRINTS**

**GRADE 3 • MODULE 5** 

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# **GRADE 3 • MODULE 5**

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# **SPRINTS**









Α

# Correct

•	Multiply.			# GOHOOT
1	1 x 6 =	23	10 x 6 =	
2	6 x 1 =	24	9 x 6 =	
3	2 x 6 =	25	4 x 6 =	
4	6 x 2 =	26	8 x 6 =	
5	3 x 6 =	27	6 x 3 =	
6	6 x 3 =	28	7 x 6 =	
7	4 x 6 =	29	6 x 6 =	
8	6 x 4 =	30	6 x 10 =	
9	5 x 6 =	31	6 x 5 =	
10	6 x 5 =	32	6 x 4 =	
11	6 x 6 =	33	6 x 1 =	
12	7 x 6 =	34	6 x 9 =	
13	6 x 7 =	35	6 x 6 =	
14	8 x 6 =	36	6 x 3 =	
15	6 x 8 =	37	6 x 2 =	
16	9 x 6 =	38	6 x 7 =	
17	6 x 9 =	39	6 x 8 =	
18	10 x 6 =	40	11 x 6 =	
19	6 x 10 =	41	6 x 11 =	
20	6 x 3 =	42	12 x 6 =	
21	1 x 6 =	43	6 x 12 =	
22	2 x 6 =	44	13 x 6 =	



В	Multiply.	Improvemer	nt	# Correct
1	6 x 1 =	23	9 x 6 =	
2	1 x 6 =	24	3 x 6 =	
3	6 x 2 =	25	8 x 6 =	
4	2 x 6 =	26	4 x 6 =	
5	6 x 3 =	27	7 x 6 =	
6	3 x 6 =	28	5 x 6 =	
7	6 x 4 =	29	6 x 6 =	
8	4 x 6 =	30	6 x 5 =	
9	6 x 5 =	31	6 x 10 =	
10	5 x 6 =	32	6 x 1 =	
11	6 x 6 =	33	6 x 6 =	
12	6 x 7 =	34	6 x 4 =	
13	7 x 6 =	35	6 x 9 =	
14	6 x 8 =	36	6 x 2 =	
15	8 x 6 =	37	6 x 7 =	
16	6 x 9 =	38	6 x 3 =	
17	9 x 6 =	39	6 x 8 =	
18	6 x 10 =	40	11 x 6 =	
19	10 x 6 =	41	6 x 11 =	
20	1 x 6 =	42	12 x 6 =	
21	10 x 6 =	43	6 x 12 =	
22	2 x 6 =	44	13 x 6 =	



## Α

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

	Multiply or divide.				
1	2 x 6 =	2	23	x 6 = 60	
2	3 x 6 =	2	24	x 6 =12	
3	4 x 6 =		25	x 6 = 18	
4	5 x 6 =		26	60 ÷ 6 =	
5	1 x 6 =		27	30 ÷ 6 =	
6	12 ÷ 6 =		28	6 ÷ 6 =	
7	18 ÷ 6 =		29	12 ÷ 6 =	
8	30 ÷ 6 =		30	18 ÷ 6 =	
9	6 ÷ 6 =		31	x 6 = 36	
10	24 ÷ 6 =	(	32	x 6 = 42	
11	6 x 6 =		33	x 6 = 54	
12	7 x 6 =	(	34	x 6 = 48	
13	8 x 6 =	(	35	42 ÷ 6 =	
14	9 x 6 =	(	36	54 ÷ 6 =	
15	10 x 6 =	(	37	36 ÷ 6 =	
16	48 ÷ 6 =	;	38	48 ÷ 6 =	
17	42 ÷ 6 =	;	39	11 x 6 =	
18	54 ÷ 6 =	4	40	66 ÷ 6 =	
19	36 ÷ 6 =	4	41	12 x 6 =	
20	60 ÷ 6 =	4	42	72 ÷ 6 =	
21	x 6 = 30	4	43	14 x 6 =	
22	x6 = 6	4	44	84 ÷ 6 =	

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Lesson 4: Date:

**Explore**: Represent and Identify Fractional Parts of Different Wholes 2/2/13



В	Multiply or divide.	Improvemen	t #	# Correct
1	1 x 6 =	23	x 6 = 12	
2	2 x 6 =	24	x 6 = 60	
3	3 x 6 =	25	x 6 = 18	
4	4 x 6 =	26	12 ÷ 6 =	
5	5 x 6 =	27	6 ÷ 6 =	
6	18 ÷ 6 =	28	60 ÷ 6 =	
7	12 ÷ 6 =	29	30 ÷ 6 =	
8	24 ÷ 6 =	30	18 ÷ 6 =	
9	6 ÷ 6 =	31	x 6 = 18	
10	30 ÷ 6 =	32	x 6 = 24	
11	10 x 6 =	33	x 6 = 54	
12	6 x 6 =	34	x 6 = 42	
13	7 x 6 =	35	48 ÷ 6 =	
14	8 x 6 =	36	54 ÷ 6 =	
15	9 x 6 =	37	36 ÷ 6 =	
16	42 ÷ 6 =	38	42 ÷ 6 =	
17	36 ÷ 6 =	39	11 x 6 =	
18	48 ÷ 6 =	40	66 ÷ 6 =	
19	60 ÷ 6 =	41	12 x 6 =	
20	54 ÷ 6 =	42	72 ÷ 6 =	
21	x 6 = 6	43	13 x 6 =	
22	x 6 = 30	44	78 ÷ 6 =	



Lesson 4: Date:

**Explore**: Represent and Identify Fractional Parts of Different Wholes 2/2/13



Α

# Correct \_\_\_\_

^	Multiply.		# Conect
1	1 x 7 =	23	10 x 7 =
2	7 x 1 =	24	9 x 7 =
3	2 x 7 =	25	4 x 7 =
4	7 x 2 =	26	8 x 7 =
5	3 x 7 =	27	7 x 3 =
6	7 x 3 =	28	7 x 7 =
7	4 x 7 =	29	6 x 7 =
8	7 x 4 =	30	7 x 10 =
9	5 x 7 =	31	7 x 5 =
10	7 x 5 =	32	7 x 6 =
11	6 x 7 =	33	7 x 1 =
12	7 x 6 =	34	7 x 9 =
13	7 x 7 =	35	7 x 4 =
14	8 x 7 =	36	7 x 3 =
15	7 x 8 =	37	7 x 2 =
16	9 x 7 =	38	7 x 7 =
17	7 x 9 =	39	7 x 8 =
18	10 x 7 =	40	11 x 7 =
19	7 x 10 =	41	7 x 11 =
20	7 x 3 =	42	12 x 7 =
21	1 x 7 =	43	7 x 12 =
22	2 x 7 =	44	13 x 7 =



В	Multiply.	Improvemen	t	# Correct
1	7 x 1 =	23	9 x 7 =	
2	1 x 7 =	24	3 x 7 =	
3	7 x 2 =	25	8 x 7 =	
4	2 x 7 =	26	4 x 7 =	
5	7 x 3 =	27	7 x 7 =	
6	3 x 7 =	28	5 x 7 =	
7	7 x 4 =	29	6 x 7 =	
8	4 x 7 =	30	7 x 5 =	
9	7 x 5 =	31	7 x 10 =	
10	5 x 7 =	32	7 x 1 =	
11	7 x 6 =	33	7 x 6 =	
12	6 x 7 =	34	7 x 4 =	
13	7 x 7 =	35	7 x 9 =	
14	7 x 8 =	36	7 x 2 =	
15	8 x 7 =	37	7 x 7 =	
16	7 x 9 =	38	7 x 3 =	
17	9 x 7 =	39	7 x 8 =	
18	7 x 10 =	40	11 x 7 =	
19	10 x 7 =	41	7 x 11 =	
20	1 x 7 =	42	12 x 7 =	
21	10 x 7 =	43	7 x 12 =	
22	2 x 7 =	44	13 x 7 =	



Δ

# Correct

_			
	Multipl	y or	divide.

	Multiply or divide.			
1	2 x 7 =	23	x 7 = 7	0
2	3 x 7 =	24	x 7 = 1	4
3	4 x 7 =	25	x 7 = 2	.1
4	5 x 7 =	26	70 ÷ 7 =	
5	1 x 7 =	27	35 ÷ 7 =	
6	14 ÷ 7 =	28	7 ÷ 7 =	
7	21 ÷ 7 =	29	14 ÷ 7 =	
8	35 ÷ 7 =	30	21 ÷ 7 =	
9	7 ÷ 7 =	31	x 7 = 4	2
10	28 ÷ 7 =	32	x 7 = 4	.9
11	6 x 7 =	33	x 7 = 6	3
12	7 x 7 =	34	x 7 = 5	6
13	8 x 7 =	35	49 ÷ 7 =	
14	9 x 7 =	36	63 ÷ 7 =	
15	10 x 7 =	37	42 ÷ 7 =	
16	56 ÷ 7 =	38	56 ÷ 7 =	
17	49 ÷ 7 =	39	11 x 7 =	
18	63 ÷ 7 =	40	77 ÷ 7 =	
19	42 ÷ 7 =	41	12 x 7 =	
20	70 ÷ 7 =	42	84 ÷ 7 =	
21	x 7 = 35	43	14 x 7 =	
22	x 7 = 7	44	98 ÷ 7 =	
		© Bill Davide		



В	Madical and Park In	Improvement	# Correct	_
	Multiply or divido			

	Multiply or divide.	·			
1	1 x 7 =	2	23	x 7 = 14	
2	2 x 7 =	2	24	x 7 = 70	
3	3 x 7 =	2	25	x 7 = 21	
4	4 x 7 =	2	26	14 ÷ 7 =	
5	5 x 7 =	2	27	7 ÷ 7 =	
6	21 ÷ 7 =	2	28	70 ÷ 7 =	
7	14 ÷ 7 =	2	29	35 ÷ 7 =	
8	28 ÷ 7 =	3	30	21 ÷ 7 =	
9	7 ÷ 7 =	3	31	x 7 = 21	
10	35 ÷ 7 =	3	32	x 7 = 28	
11	10 x 7 =	3	33	x 7 = 63	
12	6 x 7 =	3	34	x 7 = 49	
13	7 x 7 =	3	35	56 ÷ 7 =	
14	8 x 7 =	3	36	63 ÷ 7 =	
15	9 x 7 =	3	37	42 ÷ 7 =	
16	49 ÷ 7 =	3	38	49 ÷ 7 =	
17	42 ÷ 7 =	3	39	11 x 7 =	
18	56 ÷ 7 =	4	40	77 ÷ 7 =	
19	70 ÷ 7 =	4	41	12 x 7 =	
20	63 ÷ 7 =	4	42	84 ÷ 7 =	
21	x 7 = 7	4	43	13 x 7 =	
22	x 7 = 35		44	91 ÷ 7 =	



A ,	Write the fraction that is shaded.			# C	orrect
1	Vinc the maction that is shaded.	1	23	$\oplus$	1
2		1	24	lack	1
3		1	25	$\oplus$	1
4	$\bigcirc$	1	26		1
5	$\bigcirc$	1	27		1
6		1	28	$\otimes$	1
7	$\bigcirc$	1	29		1
8	$\bigcirc$	1	30	$\otimes$	1
9		1	31		1
10	$\bigcirc$	1	32	$\otimes$	1
11		1	33		1
12		1	34	$\otimes$	1
13		1	35		I
14		1	36		I
15		1	37		I
16		1	38		I
17		1	39		I
18	$\oplus$	1	40		I
19	$\oplus$	1	41		1
20	$\oplus$	1	42		1
21	$\oplus$	1	43	$\otimes$	1
22	$\oplus$	1	44	$\otimes$	1



В	Write the fraction that is shaded.	Improveme	nt	# C	Correct
1	$\bigcirc$	1	23	$\oplus$	/
2	$\bigoplus$	/	24	$\bigoplus$	/
3		/	25	igoplus	1
4	$\ominus$	1	26		1
5	$\bigcirc$	1	27		1
6		1	28		1
7	lacktriangle	1	29	$\otimes$	1
8		1	30		1
9		1	31	$\otimes$	1
10	$\ominus$	1	32		1
11		1	33	$\otimes$	1
12		1	34		1
13		1	35	$\otimes$	1
14		1	36		1
15		1	37		1
16		1	38		1
17		1	39		1
18	$\bigoplus$	1	40		1
19	$\bigoplus$	1	41		/
20	$\bigoplus$	1	42		/
21	$\bigoplus$	1	43	$\otimes$	/
22	$\oplus$	1	44	$\bigotimes$	1



Α

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

	Multiply.			
1	8 x 1 =	23	9 x 8 =	
2	1 x 8 =	24	3 x 8 =	
3	8 x 2 =	25	8 x 8 =	
4	2 x 8 =	26	4 x 8 =	
5	8 x 3 =	27	7 x 8 =	
6	3 x 8 =	28	5 x 8 =	
7	8 x 4 =	29	6 x 8 =	
8	4 x 8 =	30	8 x 5 =	
9	8 x 5 =	31	8 x 10 =	
10	5 x 8 =	32	8 x 1 =	
11	8 x 6 =	33	8 x 6 =	
12	6 x 8 =	34	8 x 4 =	
13	8 x 7 =	35	8 x 9 =	
14	7 x 8 =	36	8 x 2 =	
15	8 x 8 =	37	8 x 7 =	
16	8 x 9 =	38	8 x 3 =	
17	9 x 8 =	39	8 x 8 =	
18	8 x 10 =	40	11 x 8 =	
19	10 x 8 =	41	8 x 11 =	
20	1 x 8 =	42	12 x 8 =	
21	10 x 8 =	43	8 x 12 =	
22	2 x 8 =	44	13 x 8 =	

В	Multiply.	Improvement	t	# Correct
1	1 x 8 =	23	10 x 8 =	
2	8 x 1 =	24	9 x 8 =	
3	2 x 8 =	25	4 x 8 =	
4	8 x 2 =	26	8 x 8 =	
5	3 x 8 =	27	8 x 3 =	
6	8 x 3 =	28	7 x 8 =	
7	4 x 8 =	29	6 x 8 =	
8	8 x 4 =	30	8 x 10 =	
9	5 x 8 =	31	8 x 5 =	
10	8 x 5 =	32	8 x 6 =	
11	6 x 8 =	33	8 x 1 =	
12	8 x 6 =	34	8 x 9 =	
13	7 x 8 =	35	8 x 4 =	
14	8 x 7 =	36	8 x 3 =	
15	8 x 8 =	37	8 x 2 =	
16	9 x 8 =	38	8 x 7 =	
17	8 x 9 =	39	8 x 8 =	
18	10 x 8 =	40	11 x 8 =	
19	8 x 10 =	41	8 x 11 =	
20	8 x 3 =	42	12 x 8 =	
21	1 x 8 =	43	8 x 12 =	
22	2 x 8 =	Pill Davidson	13 x 8 =	

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Α

# Correct \_\_\_\_

1       2 x 8 =       23       x 8 = 80         2       3 x 8 =       24       x 8 = 16         3       4 x 8 =       25       x 8 = 24         4       5 x 8 =       26       80 ÷ 8 =         5       1 x 8 =       27       40 ÷ 8 =         6       16 ÷ 8 =       28       8 ÷ 8 =         7       24 ÷ 8 =       29       16 ÷ 8 =         8       40 ÷ 8 =       30       24 ÷ 8 =         9       8 ÷ 8 =       31       x 8 = 48         10       32 ÷ 8 =       32       x 8 = 56         11       6 x 8 =       33       x 8 = 72         12       7 x 8 =       34       x 8 = 64         13       8 x 8 =       35       56 ÷ 8 =         14       9 x 8 =       36       72 ÷ 8 =         15       10 x 8 =       37       48 ÷ 8 =         16       64 ÷ 8 =       39       11 x 8 =         17       56 ÷ 8 =       39       11 x 8 =         18       72 ÷ 8 =       40       88 ÷ 8 =         19       48 ÷ 8 =       41       12 x 8 =         20       80 ÷ 8 =       42       96 ÷ 8 =		Multiply or divide.		_		
3       4 x 8 =       25       x 8 = 24         4       5 x 8 =       26       80 ÷ 8 =         5       1 x 8 =       27       40 ÷ 8 =         6       16 ÷ 8 =       28       8 ÷ 8 =         7       24 ÷ 8 =       29       16 ÷ 8 =         8       40 ÷ 8 =       30       24 ÷ 8 =         9       8 ÷ 8 =       31       x 8 = 48         10       32 ÷ 8 =       32       x 8 = 56         11       6 x 8 =       33       x 8 = 72         12       7 x 8 =       34       x 8 = 64         13       8 x 8 =       35       56 ÷ 8 =         14       9 x 8 =       36       72 ÷ 8 =         15       10 x 8 =       37       48 ÷ 8 =         16       64 ÷ 8 =       39       11 x 8 =         17       56 ÷ 8 =       39       11 x 8 =         18       72 ÷ 8 =       40       88 ÷ 8 =         19       48 ÷ 8 =       41       12 x 8 =         20       80 ÷ 8 =       42       96 ÷ 8 =         21       x 8 = 40       43       14 x 8 =	1	2 x 8 =	23	3	x 8 = 80	
4       5 x 8 =       26       80 ÷ 8 =         5       1 x 8 =       27       40 ÷ 8 =         6       16 ÷ 8 =       28       8 ÷ 8 =         7       24 ÷ 8 =       29       16 ÷ 8 =         8       40 ÷ 8 =       30       24 ÷ 8 =         9       8 ÷ 8 =       31       x 8 = 48         10       32 ÷ 8 =       32       x 8 = 56         11       6 x 8 =       33       x 8 = 72         12       7 x 8 =       34       x 8 = 64         13       8 x 8 =       35       56 ÷ 8 =         14       9 x 8 =       36       72 ÷ 8 =         15       10 x 8 =       37       48 ÷ 8 =         16       64 ÷ 8 =       39       11 x 8 =         18       72 ÷ 8 =       40       88 ÷ 8 =         19       48 ÷ 8 =       41       12 x 8 =         20       80 ÷ 8 =       42       96 ÷ 8 =         21       x 8 = 40       43       14 x 8 =	2	3 x 8 =	24	ŀ	x 8 = 16	
5       1 x 8 =       27       40 ÷ 8 =         6       16 ÷ 8 =       28       8 ÷ 8 =         7       24 ÷ 8 =       29       16 ÷ 8 =         8       40 ÷ 8 =       30       24 ÷ 8 =         9       8 ÷ 8 =       31       x 8 = 48         10       32 ÷ 8 =       32       x 8 = 56         11       6 x 8 =       33       x 8 = 72         12       7 x 8 =       34       x 8 = 64         13       8 x 8 =       35       56 ÷ 8 =         14       9 x 8 =       36       72 ÷ 8 =         15       10 x 8 =       37       48 ÷ 8 =         16       64 ÷ 8 =       39       11 x 8 =         18       72 ÷ 8 =       40       88 ÷ 8 =         19       48 ÷ 8 =       41       12 x 8 =         20       80 ÷ 8 =       42       96 ÷ 8 =         21       x 8 = 40       43       14 x 8 =	3	4 x 8 =	25	<u> </u>	x 8 = 24	
6       16 ÷ 8 =       28       8 ÷ 8 =         7       24 ÷ 8 =       29       16 ÷ 8 =         8       40 ÷ 8 =       30       24 ÷ 8 =         9       8 ÷ 8 =       31       x 8 = 48         10       32 ÷ 8 =       32       x 8 = 56         11       6 x 8 =       33       x 8 = 72         12       7 x 8 =       34       x 8 = 64         13       8 x 8 =       35       56 ÷ 8 =         14       9 x 8 =       36       72 ÷ 8 =         15       10 x 8 =       37       48 ÷ 8 =         16       64 ÷ 8 =       38       64 ÷ 8 =         17       56 ÷ 8 =       39       11 x 8 =         18       72 ÷ 8 =       40       88 ÷ 8 =         19       48 ÷ 8 =       41       12 x 8 =         20       80 ÷ 8 =       42       96 ÷ 8 =         21       x 8 = 40       43       14 x 8 =	4	5 x 8 =	26		80 ÷ 8 =	
7       24 ÷ 8 =       29       16 ÷ 8 =         8       40 ÷ 8 =       30       24 ÷ 8 =         9       8 ÷ 8 =       31       x 8 = 48         10       32 ÷ 8 =       32       x 8 = 56         11       6 x 8 =       33       x 8 = 72         12       7 x 8 =       34       x 8 = 64         13       8 x 8 =       35       56 ÷ 8 =         14       9 x 8 =       36       72 ÷ 8 =         15       10 x 8 =       37       48 ÷ 8 =         16       64 ÷ 8 =       38       64 ÷ 8 =         17       56 ÷ 8 =       39       11 x 8 =         18       72 ÷ 8 =       40       88 ÷ 8 =         19       48 ÷ 8 =       41       12 x 8 =         20       80 ÷ 8 =       42       96 ÷ 8 =         21       x 8 = 40       43       14 x 8 =	5	1 x 8 =	27	<u>1</u>	40 ÷ 8 =	
8       40 ÷ 8 =       30       24 ÷ 8 =         9       8 ÷ 8 =       31      x 8 = 48         10       32 ÷ 8 =       32      x 8 = 56         11       6 x 8 =       33      x 8 = 72         12       7 x 8 =       34      x 8 = 64         13       8 x 8 =       35       56 ÷ 8 =         14       9 x 8 =       36       72 ÷ 8 =         15       10 x 8 =       37       48 ÷ 8 =         16       64 ÷ 8 =       38       64 ÷ 8 =         17       56 ÷ 8 =       39       11 x 8 =         18       72 ÷ 8 =       40       88 ÷ 8 =         19       48 ÷ 8 =       41       12 x 8 =         20       80 ÷ 8 =       42       96 ÷ 8 =         21       _x 8 = 40       43       14 x 8 =	6	16 ÷ 8 =	28	3	8 ÷ 8 =	
9       8 ÷ 8 =       31       x 8 = 48         10       32 ÷ 8 =       32       x 8 = 56         11       6 x 8 =       33       x 8 = 72         12       7 x 8 =       34       x 8 = 64         13       8 x 8 =       35       56 ÷ 8 =         14       9 x 8 =       36       72 ÷ 8 =         15       10 x 8 =       37       48 ÷ 8 =         16       64 ÷ 8 =       38       64 ÷ 8 =         17       56 ÷ 8 =       39       11 x 8 =         18       72 ÷ 8 =       40       88 ÷ 8 =         19       48 ÷ 8 =       41       12 x 8 =         20       80 ÷ 8 =       42       96 ÷ 8 =         21       x 8 = 40       43       14 x 8 =	7	24 ÷ 8 =	29		16 ÷ 8 =	
10     32 ÷ 8 =     32    x 8 = 56       11     6 x 8 =     33    x 8 = 72       12     7 x 8 =     34    x 8 = 64       13     8 x 8 =     35     56 ÷ 8 =       14     9 x 8 =     36     72 ÷ 8 =       15     10 x 8 =     37     48 ÷ 8 =       16     64 ÷ 8 =     38     64 ÷ 8 =       17     56 ÷ 8 =     39     11 x 8 =       18     72 ÷ 8 =     40     88 ÷ 8 =       19     48 ÷ 8 =     41     12 x 8 =       20     80 ÷ 8 =     42     96 ÷ 8 =       21    x 8 = 40     43     14 x 8 =	8	40 ÷ 8 =	30		24 ÷ 8 =	
11     6 x 8 =     33     x 8 = 72       12     7 x 8 =     34     x 8 = 64       13     8 x 8 =     35     56 ÷ 8 =       14     9 x 8 =     36     72 ÷ 8 =       15     10 x 8 =     37     48 ÷ 8 =       16     64 ÷ 8 =     38     64 ÷ 8 =       17     56 ÷ 8 =     39     11 x 8 =       18     72 ÷ 8 =     40     88 ÷ 8 =       19     48 ÷ 8 =     41     12 x 8 =       20     80 ÷ 8 =     42     96 ÷ 8 =       21     x 8 = 40     43     14 x 8 =	9	8 ÷ 8 =	31		x 8 = 48	
12       7 x 8 =       34       x 8 = 64         13       8 x 8 =       35       56 ÷ 8 =         14       9 x 8 =       36       72 ÷ 8 =         15       10 x 8 =       37       48 ÷ 8 =         16       64 ÷ 8 =       38       64 ÷ 8 =         17       56 ÷ 8 =       39       11 x 8 =         18       72 ÷ 8 =       40       88 ÷ 8 =         19       48 ÷ 8 =       41       12 x 8 =         20       80 ÷ 8 =       42       96 ÷ 8 =         21       x 8 = 40       43       14 x 8 =	10	32 ÷ 8 =	32	2	x 8 = 56	
13     8 x 8 =     35     56 ÷ 8 =       14     9 x 8 =     36     72 ÷ 8 =       15     10 x 8 =     37     48 ÷ 8 =       16     64 ÷ 8 =     38     64 ÷ 8 =       17     56 ÷ 8 =     39     11 x 8 =       18     72 ÷ 8 =     40     88 ÷ 8 =       19     48 ÷ 8 =     41     12 x 8 =       20     80 ÷ 8 =     42     96 ÷ 8 =       21     x 8 = 40     43     14 x 8 =	11	6 x 8 =	33	3	x 8 = 72	
14       9 x 8 =       36       72 ÷ 8 =         15       10 x 8 =       37       48 ÷ 8 =         16       64 ÷ 8 =       38       64 ÷ 8 =         17       56 ÷ 8 =       39       11 x 8 =         18       72 ÷ 8 =       40       88 ÷ 8 =         19       48 ÷ 8 =       41       12 x 8 =         20       80 ÷ 8 =       42       96 ÷ 8 =         21       x 8 = 40       43       14 x 8 =	12	7 x 8 =	34	ŀ	x 8 = 64	
15       10 x 8 =       37       48 ÷ 8 =         16       64 ÷ 8 =       38       64 ÷ 8 =         17       56 ÷ 8 =       39       11 x 8 =         18       72 ÷ 8 =       40       88 ÷ 8 =         19       48 ÷ 8 =       41       12 x 8 =         20       80 ÷ 8 =       42       96 ÷ 8 =         21       _ x 8 = 40       43       14 x 8 =	13	8 x 8 =	35	5	56 ÷ 8 =	
16       64 ÷ 8 =       38       64 ÷ 8 =         17       56 ÷ 8 =       39       11 x 8 =         18       72 ÷ 8 =       40       88 ÷ 8 =         19       48 ÷ 8 =       41       12 x 8 =         20       80 ÷ 8 =       42       96 ÷ 8 =         21      x 8 = 40       43       14 x 8 =	14	9 x 8 =	36		72 ÷ 8 =	
17       56 ÷ 8 =       39       11 x 8 =         18       72 ÷ 8 =       40       88 ÷ 8 =         19       48 ÷ 8 =       41       12 x 8 =         20       80 ÷ 8 =       42       96 ÷ 8 =         21       _ x 8 = 40       43       14 x 8 =	15	10 x 8 =	37	1	48 ÷ 8 =	
18       72 ÷ 8 =       40       88 ÷ 8 =         19       48 ÷ 8 =       41       12 x 8 =         20       80 ÷ 8 =       42       96 ÷ 8 =         21      x 8 = 40       43       14 x 8 =	16	64 ÷ 8 =	38	3	64 ÷ 8 =	
19       48 ÷ 8 =       41       12 x 8 =         20       80 ÷ 8 =       42       96 ÷ 8 =         21      x 8 = 40       43       14 x 8 =	17	56 ÷ 8 =	39	<u> </u>	11 x 8 =	
20       80 ÷ 8 =         21       x 8 = 40         42       96 ÷ 8 =         43       14 x 8 =	18	72 ÷ 8 =	40		88 ÷ 8 =	
21 x 8 = 40	19	48 ÷ 8 =	41		12 x 8 =	
	20	80 ÷ 8 =	42	<u> </u>	96 ÷ 8 =	
22 x 8 = 1	21	x 8 = 40	43	3	14 x 8 =	
	22	x 8 = 1	44	١ <u> </u>	112 ÷ 8 =	

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Lesson 10:

В	Multiply or divide.	Improvemer	nt	# Correct
1	1 x 8 =	23	x 8 = 16	
2	2 x 8 =	24	x 8 = 80	
3	3 x 8 =	25	x 8 = 24	
4	4 x 8 =	26	16 ÷ 8 =	
5	5 x 8 =	27	8 ÷ 8 =	
6	24 ÷ 8 =	28	80 ÷ 8 =	
7	16 ÷ 8 =	29	40 ÷ 8 =	
8	32 ÷ 8 =	30	24 ÷ 8 =	
9	8 ÷ 8 =	31	x 8 = 24	
10	40 ÷ 8 =	32	x 8 = 32	
11	10 x 8 =	33	x 8 = 72	
12	6 x 8 =	34	x 8 = 56	
13	7 x 8 =	35	64 ÷ 8 =	
14	8 x 8 =	36	72 ÷8 =	
15	9 x 8 =	37	48 ÷ 8 =	
16	56 ÷ 8 =	38	56 ÷ 8 =	
17	48 ÷ 8 =	39	11 x 8 =	
18	64 ÷ 8 =	40	88 ÷ 8 =	
19	80 ÷ 8 =	41	12 x 8 =	
20	72 ÷8 =	42	96 ÷ 8 =	
21	x 8 = 8	43	13 x 8 =	
22	x 8 = 40	44	104 ÷ 8 =	

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	A	Multiply.		;	# Correct
г					

	Multiply.		_		
1	9 x 1 =	23	3	9 x 9 =	
2	1 x 9 =	24	1	3 x 9 =	
3	9 x 2 =	25	5	8 x 9 =	
4	2 x 9 =	26	3	4 x 9 =	
5	9 x 3 =	27	7	7 x 9 =	
6	3 x 9 =	28	3	5 x 9 =	
7	9 x 4 =	29	9	6 x 9 =	
8	4 x 9 =	30	)	9 x 5 =	
9	9 x 5 =	31	1	9 x 10 =	
10	5 x 9 =	32	2	9 x 1 =	
11	9 x 6 =	33	3	9 x 6 =	
12	6 x 9 =	34	1	9 x 4 =	
13	9 x 7 =	35	5	9 x 9 =	
14	7 x 9 =	36	3	9 x 2 =	
15	9 x 8 =	37	7	9 x 7 =	
16	8 x 9 =	38	3	9 x 3 =	
17	9 x 9 =	39	9	9 x 8 =	
18	9 x 10 =	40	)	11 x 9 =	
19	10 x 9 =	41	1	9 x 11 =	
20	1 x 9 =	42	2	12 x 9 =	
21	10 x 9 =	43	3	9 x 12 =	
22	2 x 9 =	44	1	13 x 9 =	

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В	Multiply.	Improvemer	nt	# Correct
1	1 x 9 =	23	10 x 9 =	
2	9 x 1 =	24	9 x 9 =	
3	2 x 9 =	25	4 x 9 =	
4	9 x 2 =	26	8 x 9 =	
5	3 x 9 =	27	3 x 9 =	
6	9 x 3 =	28	7 x 9 =	
7	4 x 9 =	29	6 x 9 =	
8	9 x 4 =	30	9 x 10 =	
9	5 x 9 =	31	9 x 5 =	
10	9 x 5 =	32	9 x 6 =	
11	6 x 9 =	33	9 x 1 =	
12	9 x 6 =	34	9 x 9 =	
13	7 x 9 =	35	9 x 4 =	
14	9 x 7 =	36	9 x 3 =	
15	8 x 9 =	37	9 x 2 =	
16	9 x 8 =	38	9 x 7 =	
17	9 x 9 =	39	9 x 8 =	
18	10 x 9 =	40	11 x 9 =	
19	9 x 10 =	41	9 x 11 =	
20	9 x 3 =	42	12 x 9 =	
21	1 x 9 =	43	9 x 12 =	
22	2 x 9 =	Rill Davids	13 x 9 =	

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A

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

Multiply or o	livide.
---------------	---------

	Multiply or divide.	9		
1	2 x 9 =	23	x 9 = 90	
2	3 x 9 =	24	x 9 = 18	
3	4 x 9 =	25	x 9 = 27	
4	5 x 9 =	26	90 ÷ 9 =	
5	1 x 9 =	27	45 ÷ 9 =	
6	18 ÷ 9 =	28	9 ÷ 9 =	
7	27 ÷ 9 =	29	18 ÷ 9 =	
8	45 ÷ 9 =	30	27 ÷ 9 =	
9	9 ÷ 9 =	31	x 9 = 54	
10	36 ÷ 9 =	32	x 9 = 63	
11	6 x 9 =	33	x 9 = 81	
12	7 x 9 =	34	x 9 = 72	
13	8 x 9 =	35	63 ÷ 9 =	
14	9 x 9 =	36	81 ÷ 9 =	
15	10 x 9 =	37	54 ÷ 9 =	
16	72 ÷ 9 =	38	72 ÷ 9 =	
17	63 ÷ 9 =	39	11 x 9 =	
18	81 ÷ 9 =	40	99 ÷ 9 =	
19	54 ÷ 9 =	41	12 x 9 =	
20	90 ÷ 9 =	42	108 ÷ 9 =	
21	x 9 = 45	43	14 x 9 =	
22	x 9 = 9	44	126 ÷ 9 =	
		Pill Davida		

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Date:

В	Multiply or divide.	Improvemer	nt	# Correct
1	1 x 9 =	23	x 9 = 18	
2	2 x 9 =	24	x 9 = 90	
3	3 x 9 =	25	x 9 = 27	
4	4 x 9 =	26	18 ÷ 9 =	
5	5 x 9 =	27	9 ÷ 9 =	
6	27 ÷ 9 =	28	90 ÷ 9 =	
7	18 ÷ 9 =	29	45 ÷ 9 =	
8	36 ÷ 9 =	30	27 ÷ 9 =	
9	9 ÷ 9 =	31	x 9 = 27	
10	45 ÷ 9 =	32	x 9 = 36	
11	10 x 9 =	33	x 9 = 81	
12	6 x 9 =	34	x 9 = 63	
13	7 x 9 =	35	72 ÷ 9 =	
14	8 x 9 =	36	81 ÷ 9 =	
15	9 x 9 =	37	54 ÷ 9 =	
16	63 ÷ 9 =	38	63 ÷ 9 =	
17	54 ÷ 9 =	39	11 x 9 =	
18	72 ÷ 9 =	40	99 ÷ 9 =	
19	90 ÷ 9 =	41	12 x 9 =	

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42

43

44



20

21

22

Date:

108 ÷ 9 =

13 x 9 =

 $117 \div 9 =$ 

81 ÷ 9 =

x 9 = 9

x 9 = 45

# Correct Divide.

	Divide.			
1	3 ÷ 3 =	23	24 ÷ 3 =	
2	4 ÷ 4 =	24	16 ÷ 2 =	
3	5 ÷ 5 =	25	30 ÷ 10 =	
4	19 ÷ 19 =	26	30 ÷ 3 =	
5	0 ÷ 1 =	27	27 ÷ 3 =	
6	0 ÷ 2 =	28	18 ÷ 2 =	
7	0 ÷ 3 =	29	40 ÷ 10 =	
8	0 ÷ 19 =	30	40 ÷ 4 =	
9	6 ÷ 3 =	31	20 ÷ 4 =	
10	9 ÷ 3 =	32	20 ÷ 5 =	
11	12 ÷ 3 =	33	24 ÷ 4 =	
12	15 ÷ 3 =	34	30 ÷ 5 =	
13	4 ÷ 2 =	35	28 ÷ 4 =	
14	6 ÷ 2 =	36	40 ÷ 5 =	
15	8 ÷ 2 =	37	32 ÷ 4 =	
16	10 ÷ 2 =	38	45 ÷ 5 =	
17	18 ÷ 3 =	39	44 ÷ 4 =	
18	12 ÷ 2 =	40	36 ÷ 4 =	
19	21 ÷ 3 =	41	48 ÷ 6 =	
20	14 ÷ 2 =	42	63 ÷ 7 =	
21	20 ÷ 10 =	43	64 ÷ 8 =	
22	20 ÷ 2 =	44	72 ÷ 9 =	

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Lesson 17: Date:

Practice Placing Various Fractions on the Number Line 2/1/13



В

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

<b>D</b>	Divide.	improvemer	·	# COITECT
1	2 ÷ 2 =	23	16 ÷ 2 =	
2	3 ÷ 3 =	24	24 ÷ 3 =	
3	4 ÷ 4 =	25	30 ÷ 3 =	
4	17 ÷ 17 =	26	30 ÷ 10 =	
5	0 ÷ 2 =	27	18 ÷ 2 =	
6	0 ÷ 3 =	28	27 ÷ 3 =	
7	0 ÷ 4 =	29	40 ÷ 4 =	
8	0 ÷ 17 =	30	40 ÷ 10 =	
9	4 ÷ 2 =	31	20 ÷ 5 =	
10	6 ÷ 2 =	32	20 ÷ 4 =	
11	8 ÷ 2 =	33	30 ÷ 5 =	
12	10 ÷ 2 =	34	24 ÷ 4 =	
13	6 ÷ 3 =	35	40 ÷ 5 =	
14	9 ÷ 3 =	36	28 ÷ 4 =	
15	12 ÷ 3 =	37	45 ÷ 5 =	
16	15 ÷ 3 =	38	32 ÷ 4 =	
17	12 ÷ 2 =	39	55 ÷ 5 =	
18	18 ÷ 3 =	40	36 ÷ 4 =	
19	14 ÷ 2 =	41	54 ÷ 6 =	
20	21 ÷ 3 =	42	56 ÷ 7 =	
21	20 ÷ 2 =	43	72 ÷ 8 =	
22	20 ÷ 10 =	44	63 ÷ 9 =	

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Lesson 17: Date:

Practice Placing Various Fractions on the Number Line 2/1/13

Α				# Correct
	Write each fraction as a whole	number.		
1	$\frac{2}{1}$ =	23	$\frac{6}{3}$ =	
2	$\frac{2}{2}$ =	24	$\frac{6}{3} = \frac{3}{3} = \frac{3}{3}$	
3	$\frac{4}{2}$ =	25	$\frac{3}{1}$ =	
4	$\frac{6}{2}$ =	26	$\frac{9}{3}$ =	
5	$\frac{10}{2}$ =	27	$\frac{16}{4} =$	
6	$\frac{10}{2} = \frac{8}{2} = \frac{8}{2}$	28	$\frac{20}{4}$ =	
7	$\frac{5}{1}$ =	29	$\frac{12}{3} = \frac{15}{3} = \frac{15}{3}$	
8	$\frac{5}{5}$ =	30	$\frac{15}{3}$ =	
9	$\frac{10}{5} = \frac{15}{5} = \frac{15}{5}$	31	$\frac{70}{10} =$	
10	$\frac{15}{5} =$	32	$\frac{12}{2}$ =	
11	$\frac{25}{5} =$	33	$\frac{14}{2}$ =	
12	$\frac{20}{5} =$	34	$\frac{90}{10}$ =	
13	$\frac{10}{10}$ =	35	$\frac{30}{5}$ =	
14	$\frac{50}{10} =$	36	$\frac{30}{5} = \frac{35}{5} = \frac{35}{5}$	
15	$\frac{30}{10}$ =	37	$\frac{60}{10}$ =	
16	$\frac{10}{1}$ =	38	$\frac{18}{2}$ =	
17	$\frac{20}{10}$ =	39	$\frac{40}{5} =$	
18	$\frac{40}{10}$ =	40	$\frac{80}{10}$ =	
19	$\frac{8}{4}$ =	41	$\frac{16}{2}$ =	
20	$\frac{4}{4} =$	42	$\frac{16}{2} =$ $\frac{45}{5} =$ $\frac{27}{3} =$	
21	$\frac{4}{1}$ =	43	$\frac{27}{3}$ =	
22	$\frac{12}{4}$ =	44	$\frac{32}{4}$ =	

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В	Write each fraction as a whole number.	Improvement	# Correct
1	$\frac{5}{1} =$	23	$\frac{8}{4}$ =
2	\frac{5}{5} =	24	$\frac{4}{4}$ =
3	$\frac{10}{5}$ =	25	$\frac{4}{1} =$
4	$\frac{15}{5}$ =	26	$\frac{12}{4}$ =
5	$\frac{25}{5} =$	27	$\frac{12}{3}$ =
6	$\frac{20}{5}$ =	28	$\frac{15}{3}$ =
7	$\frac{2}{1}$ =	29	$\frac{16}{4}$ =
8	$\frac{2}{2}$ =	30	$\frac{20}{4}$ =
9	$\frac{4}{2}$ =	31	$\frac{90}{10}$ =
10	$\frac{6}{2}$ =	32	$\frac{30}{5} = \frac{35}{5} = \frac{35}{5}$
11	$\frac{10}{2}$ =	33	$\frac{35}{5}$ =
12	$\frac{\overline{2}}{2} = \frac{8}{2} =$	34	$\frac{70}{10}$ =
13	$\frac{10}{1}$ =	35	$\frac{12}{2} =$
14	$\frac{10}{10}$ =	36	$\frac{14}{2}$ =
15	$\frac{50}{10}$ =	37	$\frac{80}{10}$ =
16	$\frac{30}{10}$ =	38	$\frac{45}{5} =$
17	$\frac{20}{10}$ =	39	$\frac{16}{2}$ =
18	$\frac{40}{10}$ =	40	$\frac{60}{10} =$
19	$\frac{6}{3}$ =	41	$\frac{18}{2} =$
20	$\frac{3}{3}$ =	42	$\frac{40}{5}$ =
21	$\frac{3}{1}$ =	43	$\frac{36}{4} = \frac{24}{3} = \frac{24}{3}$
22	$\frac{9}{3}$ =	44	$\frac{24}{3}$ =

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## **Mathematics Curriculum**



# SPRINTS

**GRADE 3 • MODULE 6** 

### **GRADE 3 • MODULE 6**

### Collecting and Displaying Data

Module Overview	
Topic A: Generate and Analyze Categorical Data	6.A.1
Topic B: Generate and Analyze Measurement Data	6.B.1
Module Assessment	6.S.1

## **SPRINTS**

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Module 6: Date: Collecting and Displaying Data 12/6/13



#### Α

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

	Multiply or divide.				
1	2 x 6 =	23	3	x 6 = 60	
2	3 x 6 =	24	4	x 6 =12	
3	4 x 6 =	25	5	x 6 = 18	
4	5 x 6 =	26	6	60 ÷ 6 =	
5	1 x 6 =	27	7	30 ÷ 6 =	
6	12 ÷ 6 =	28	8	6 ÷ 6 =	
7	18 ÷ 6 =	29	9	12 ÷ 6 =	
8	30 ÷ 6 =	30	0	18 ÷ 6 =	
9	6 ÷ 6 =	3.	1	x 6 = 36	
10	24 ÷ 6 =	32	2	x 6 = 42	
11	6 x 6 =	33	3	x 6 = 54	
12	7 x 6 =	34	4	x 6 = 48	
13	8 x 6 =	35	5	42 ÷ 6 =	
14	9 x 6 =	36	6	54 ÷ 6 =	
15	10 x 6 =	37	7	36 ÷ 6 =	
16	48 ÷ 6 =	38	8	48 ÷ 6 =	
17	42 ÷ 6 =	39	9	11 x 6 =	
18	54 ÷ 6 =	40	0	66 ÷ 6 =	
19	36 ÷ 6 =	4	1	12 x 6 =	
20	60 ÷ 6 =	42	2	72 ÷ 6 =	
21	x 6 = 30	43	3	14 x 6 =	
22	x6 = 6	44	4	84 ÷ 6 =	



Lesson 3: Date:

Create scaled bar graphs. 12/6/13



Improvement # Correct В

D	Multiply or divide.	improvemen		# Conect
1	1 x 6 =	23	x 6 = 12	
2	2 x 6 =	24	x 6 = 60	
3	3 x 6 =	25	x 6 = 18	
4	4 x 6 =	26	12 ÷ 6 =	
5	5 x 6 =	27	6 ÷ 6 =	
6	18 ÷ 6 =	28	60 ÷ 6 =	
7	12 ÷ 6 =	29	30 ÷ 6 =	
8	24 ÷ 6 =	30	18 ÷ 6 =	
9	6 ÷ 6 =	31	x 6 = 18	
10	30 ÷ 6 =	32	x 6 = 24	
11	10 x 6 =	33	x 6 = 54	
12	6 x 6 =	34	x 6 = 42	
13	7 x 6 =	35	48 ÷ 6 =	
14	8 x 6 =	36	54 ÷ 6 =	
15	9 x 6 =	37	36 ÷ 6 =	
16	42 ÷ 6 =	38	42 ÷ 6 =	
17	36 ÷ 6 =	39	11 x 6 =	
18	48 ÷ 6 =	40	66 ÷ 6 =	
19	60 ÷ 6 =	41	12 x 6 =	
20	54 ÷ 6 =	42	72 ÷ 6 =	
21	x 6 = 6	43	13 x 6 =	
22	x 6 = 30	44	78 ÷ 6 =	

Lesson 3: Date:

Create scaled bar graphs. 12/6/13





## **Mathematics Curriculum**



## Table of Contents SPRINTS **GRADE 3 • MODULE 7**

**GRADE 3 • MODULE 7** 

### Geometry and Measurement Word Problems

Module Overview	• • • • • • •
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Topic C: Problem Solving with Perimeter	7.C.1
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## **SPRINTS**

NOTE: Student sheets should be printed at 100% scale to preserve the intended size of figures for accurate measurements. Adjust your copier or printer settings to actual size and set page scaling to none.



Module 7: Date:

Geometry and Measurement Word Problems 1/29/14



i

Lesson 1:

Solve word problems in varied contexts using a letter to represent the unknown.

Lesson 2:

Solve word problems in varied contexts using a letter to represent the unknown.

1/29/14

2 This work is

7.B.9

Lesson 5: Date:

Compare and classify other polygons. 1/29/14



Lesson 7:

Date:

Reason about composing and decomposing polygons using tetrominoes.



Lesson 8: Date:

Create a tangram puzzle and observe relationships among the shapes.



Lesson 9: Date:

Reason about composing and decomposing polygons using tangrams.





Lesson 10:

Decompose quadrilaterals to understand perimeter as the boundary of a shape.

1/29/14

7.C.9

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Lesson 12:

Date:

Measure side lengths in whole number units to determine the perimeter of polygons.

Lesson 13:

Date:

Explore perimeter as an attribute of plane figures and solve problems.



Lesson 14:

Date:

Determine the perimeter of regular polygons and rectangles when whole number measurements are missing.



Lesson 15: Date:

Solve word problems to determine perimeter with given side lengths.



Lesson 16:

Use string to measure the perimeter of various circles to the nearest quarter inch.

1/29/14

13

Α

# Correct

A	Solve.			# Correct
1	2 x 2 =	23	x 2 = 20	
2	3 x 2 =	24	x 2 = 4	
3	4 x 2 =	25	x 2 = 6	
4	5 x 2 =	26	20 ÷ 2 =	
5	1 x 2 =	27	10 ÷ 2 =	
6	4 ÷ 2 =	28	2 ÷ 1 =	
7	6 ÷ 2 =	29	4 ÷ 2 =	
8	10 ÷ 2 =	30	6 ÷ 2 =	
9	2 ÷ 1 =	31	x 2 = 12	
10	8 ÷ 2 =	32	x 2 = 14	
11	6 x 2 =	33	x 2 = 18	
12	7 x 2 =	34	x 2 = 16	
13	8 x 2 =	35	14 ÷ 2 =	
14	9 x 2 =	36	18 ÷ 2 =	
15	10 x 2 =	37	12 ÷ 2 =	
16	16 ÷ 2 =	38	16 ÷ 2 =	
17	14 ÷ 2 =	39	11 x 2 =	
18	18 ÷ 2 =	40	22 ÷ 2 =	
19	12 ÷ 2 =	41	12 x 2 =	
20	20 ÷ 2 =	42	24 ÷ 2 =	
21	x 2 = 10	43	14 x 2 =	
22	x 2 = 12	44	28 ÷ 2 =	



Lesson 20:

Construct rectangles with a given perimeter using unit squares and determine their areas.



7.D.31

В	Solve.	Improvemer	nt	# Correct
1	1 x 2 =	23	x 2 = 4	
2	2 x 2 =	24	x 2 = 20	
3	3 x 2 =	25	x 2 = 6	
4	4 x 2 =	26	4 ÷ 2 =	
5	5 x 2 =	27	2 ÷ 1 =	
6	6 ÷ 2 =	28	20 ÷ 2 =	
7	4 ÷ 2 =	29	10 ÷ 2 =	
8	8 ÷ 2 =	30	6 ÷ 2 =	
9	2 ÷ 1 =	31	x 2 = 12	
10	10 ÷ 2 =	32	x 2 = 16	
11	10 x 2 =	33	x 2 = 18	
12	6 x 2 =	34	x 2 = 14	
13	7 x 2 =	35	16 ÷ 2 =	
14	8 x 2 =	36	18 ÷ 2 =	
15	9 x 2 =	37	12 ÷ 2 =	
16	14 ÷ 2 =	38	14 ÷ 2 =	
17	12 ÷ 2 =	39	11 x 2 =	
18	16 ÷ 2 =	40	22 ÷ 2 =	
19	20 ÷ 2 =	41	12 x 2 =	
20	18 ÷ 2 =	42	24 ÷ 2 =	
21	x 2 = 12	43	13 x 2 =	
22	x 2 = 10	44	26 ÷ 2 =	



Lesson 20:

Construct rectangles with a given perimeter using unit squares and determine their areas.

engage<sup>ny</sup>

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

Solve

	Solve.		_		
1	2 x 3 =	23	3	x 3 = 10	
2	3 x 3 =	24	ŀ	x 3 = 6	
3	4 x 3 =	25	5	x 3 = 9	
4	5 x 3 =	26	5	30 ÷ 3 =	
5	1 x 3 =	27	<u>.</u>	15 ÷ 3 =	
6	6 ÷ 3 =	28	3	3 ÷ 3 =	
7	9 ÷ 3 =	29		6 ÷ 3 =	
8	15 ÷ 3 =	30		9 ÷ 3 =	
9	3 ÷ 3 =	31		x 3 = 18	
10	12 ÷ 3 =	32	2	x 3 = 21	
11	6 x 3 =	33	3	x 3 = 27	
12	7 x 3 =	34	Ŀ	x 3 = 24	
13	8 x 3 =	35	5	21 ÷ 3 =	
14	9 x 3 =	36	3	27 ÷ 3 =	
15	10 x 3 =	37	<u>'</u>	18 ÷ 3 =	
16	24 ÷ 3 =	38	3	24 ÷ 3 =	
17	21 ÷ 3 =	39		11 x 3 =	
18	27 ÷ 3 =	40		33 ÷ 3 =	
19	18 ÷ 3 =	41		12 x 3 =	
20	30 ÷ 3 =	42	2	36 ÷ 3 =	
21	x 3 = 15	43	3	13 x 3 =	
22	x 3 = 3	44		39 ÷ 3 =	



Lesson 21:

Construct rectangles with a given perimeter using unite square and determine their areas.

engage<sup>ny</sup>

1/29/14

В	Improvement	# Correct
	improvement	# OdiToot

	Solve.	improvemer		# Ooncot
1	1 x 3 =	23	x 3 = 6	
2	2 x 3 =	24	x 3 = 30	
3	3 x 3 =	25	x 3 = 9	
4	4 x 3 =	26	6 ÷ 3 =	
5	5 x 3 =	27	3 ÷ 3 =	
6	9 ÷ 3 =	28	30 ÷ 3 =	
7	6 ÷ 3 =	29	15 ÷ 3 =	
8	12 ÷ 3 =	30	9 ÷ 3 =	
9	3 ÷ 3 =	31	x 3 = 18	
10	15 ÷ 3 =	32	x 3 = 24	
11	10 x 3 =	33	x 3 = 27	
12	6 x 3 =	34	x 3 = 21	
13	7 x 3 =	35	24 ÷ 3 =	
14	8 x 3 =	36	27 ÷ 3 =	
15	9 x 3 =	37	18 ÷ 3 =	
16	21 ÷ 3 =	38	21 ÷ 3 =	
17	18 ÷ 3 =	39	11 x 3 =	
18	24 ÷ 3 =	40	33 ÷ 3 =	
19	30 ÷ 3 =	41	12 x 3 =	
20	27 ÷ 3 =	42	36 ÷ 3 =	
21	x 3 = 3	43	13 x 3 =	
22	x 3 =15	44	39 ÷ 3 =	



Lesson 21:

Construct rectangles with a given perimeter using unite square and determine their areas.

engage<sup>ny</sup>

# Correct

	Multiply or divide.			
1	2 x 4 =	23	x 4 = 40	
2	3 x 4 =	24	x 4 = 8	
3	4 x 4 =	25	x 4 = 12	
4	5 x 4 =	26	40 ÷ 4 =	
5	1 x 4 =	27	20 ÷ 4 =	
6	8 ÷ 4 =	28	4 ÷ 4 =	
7	12 ÷ 4 =	29	8 ÷ 4 =	
8	20 ÷ 4 =	30	12 ÷ 4 =	
9	4 ÷ 4 =	31	x 4 = 24	
10	16 ÷ 4 =	32	x 4 = 28	
11	6 x 4 =	33	x 4 = 36	
12	7 x 4 =	34	x 4 = 32	
13	8 x 4 =	35	28 ÷ 4 =	
14	9 x 4 =	36	36 ÷ 4 =	
15	10 x 4 =	37	24 ÷ 4 =	
16	32 ÷ 4 =	38	32 ÷ 4 =	
17	28 ÷ 4 =	39	11 x 4 =	
18	36 ÷ 4 =	40	44 ÷ 4 =	
19	24 ÷ 4 =	41	12 ÷ 4 =	
20	40 ÷ 4 =	42	48 ÷ 4 =	
21	x 4 =20	43	14 x 4 =	
22	x 4 = 4	44	56 ÷ 4 =	



Lesson 22:

Date:

Use a line plot to record the number of rectangles constructed in Lessons 20 and 21. 1/29/14

engage<sup>ny</sup>

Multiply.

В	Multply or divide.	Improvemer	nt	# Correct
1	1 x 4 =	23	x 4 = 8	
2	2 x 4 =	24	x 4 = 40	
3	3 x 4 =	25	x 4 = 12	
4	4 x 4 =	26	8 ÷ 4 =	
5	5 x 4 =	27	4 ÷ 4 =	
6	12 ÷ 4 =	28	40 ÷ 4 =	
7	8 ÷ 4 =	29	20 ÷ 4 =	
8	16 ÷ 4 =	30	12 ÷ 4 =	
9	4 ÷ 4 =	31	x 4 = 12	
10	20 ÷ 4 =	32	x 4 = 16	
11	10 x 4 =	33	x 4 = 36	
12	6 x 4 =	34	x 4 = 28	
13	7 x 4 =	35	32 ÷ 4 =	
14	8 x 4 =	36	36 ÷ 4 =	
15	9 x 4 =	37	24 ÷ 4 =	
16	28 ÷ 4 =	38	28 ÷ 4 =	
17	24 ÷ 4 =	39	11 x 4 =	
18	32 ÷ 4 =	40	44 ÷ 4 =	
19	40 ÷ 4 =	41	12 x 4 =	
20	36 ÷ 4 =	42	48 ÷ 4 =	
21	x 4 = 4	43	13 x 4 =	



Lesson 22:

Date:

x 4 = 20

Use a line plot to record the number of rectangles constructed in Lessons 20 and 21. 1/29/14

44



52 ÷ 4 =

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

Multiply	or divide.	

	Multiply or divide.		
1	2 x 5 =	23	3 x 5 = 50
2	3 x 5 =	24	x 5 = 10
3	4 x 5 =	25	5 x 5 = 15
4	5 x 5 =	26	50 ÷ 5 =
5	1 x 5 =	27	7 25 ÷ 5 =
6	10 ÷ 5 =	28	3 5 ÷ 5 =
7	15 ÷ 5 =	29	10 ÷ 5 =
8	25 ÷ 5 =	30	15 ÷ 5 =
9	5 ÷ 5 =	31	x 5 = 30
10	20 ÷ 5 =	32	2 x 5 = 35
11	6 x 5 =	33	3 x 5 = 45
12	7 x 5 =	34	x 5 = 40
13	8 x 5 =	35	35 ÷ 5 =
14	9 x 5 =	36	6 45 ÷ 5 =
15	10 x 5 =	37	7 30 ÷ 5 =
16	40 ÷ 5 =	38	3 40 ÷ 5 =
17	35 ÷ 5 =	39	11 x 5 =
18	45 ÷ 5 =	40	55 ÷ 5 =
19	30 ÷ 5 =	41	15 ÷ 5 =
20	50 ÷ 5 =	42	2 60 ÷ 5 =
21	x 5 = 25	43	3 12 x 5 =
22	x 5 = 5	44	70 ÷ 5 =



Lesson 23: Date:

Solve a variety of word problems with perimeter. 1/29/14



В	Multiply or divide.	Improvemer	nt	# Correct
1	1 x 5 =	23	x 5 = 10	
2	2 x 5 =	24	x 5 = 50	
3	3 x 5 =	25	x 5 = 15	
4	4 x 5 =	26	10 ÷ 5 =	
5	5 x 5 =	27	5 ÷ 5 =	
6	15 ÷ 5 =	28	50 ÷ 5 =	
7	10 ÷ 5 =	29	25 ÷ 5 =	
8	20 ÷ 5 =	30	15 ÷ 5 =	
9	5 ÷ 5 =	31	x 5 = 15	
10	25 ÷ 5 =	32	x 5 = 20	
11	10 x 5 =	33	x 5 = 45	
12	6 x 5 =	34	x 5 = 35	
13	7 x 5 =	35	40 ÷ 5 =	
14	8 x 5 =	36	45 ÷ 5 =	

	COMMON Lesson 23: Solve a variety of word problems with perimeter. CORE Date: 1/29/14 engage  ny				
22	x 5 =25	4	4	65 ÷ 5 =	
21	x 5 = 5	4	3	13 x 5 =	
20	45 ÷ 5 =	4.	2	60 ÷ 5 =	
19	50 ÷ 5 =	4	1	12 x 5 =	
18	40 ÷ 5 =	4	0	55 ÷ 5 =	
17	30 ÷ 5 =	3	9	11 x 5 =	
16	35 ÷ 5 =	3	8	35 ÷ 5 =	
15	9 x 5 =	3	7	30 ÷ 5 =	
14	8 x 5 =	3	6	45 ÷ 5 =	
13	7 x 5 =	3	5	40 ÷ 5 =	
12	6 x 5 =	3.	4	x 5 = 35	
11	10 x 5 =	3	3	x 5 = 45	
10	25 ÷ 5 =	3.	2	x 5 = 20	
9	5 ÷ 5 =	3	П	$ \times$ 5 = 15	



#### Multiply.



Lesson 24:

1/29/14

Use rectangles to draw a robot with specified perimeter measurements, and reason about the different areas that may be produced.

# Correct

Multiply or divide

	Multiply or divide.			
1	2 x 6 =	23	x 6 = 60	
2	3 x 6 =	24	x 6 =12	
3	4 x 6 =	25	x 6 = 18	
4	5 x 6 =	26	60 ÷ 6 =	
5	1 x 6 =	27	30 ÷ 6 =	
6	12 ÷ 6 =	28	6 ÷ 6 =	
7	18 ÷ 6 =	29	12 ÷ 6 =	
8	30 ÷ 6 =	30	18 ÷ 6 =	
9	6 ÷ 6 =	31	x 6 = 36	
10	24 ÷ 6 =	32	x 6 = 42	
11	6 x 6 =	33	x 6 = 54	
12	7 x 6 =	34	x 6 = 48	
13	8 x 6 =	35	42 ÷ 6 =	
14	9 x 6 =	36	54 ÷ 6 =	
15	10 x 6 =	37	36 ÷ 6 =	
16	48 ÷ 6 =	38	48 ÷ 6 =	
17	42 ÷ 6 =	39	11 x 6 =	
18	54 ÷ 6 =	40	66 ÷ 6 =	
19	36 ÷ 6 =	41	12 x 6 =	
20	60 ÷ 6 =	42	72 ÷ 6 =	
21	x 6 = 30	43	14 x 6 =	
22	x6 = 6	44	84 ÷ 6 =	



Lesson 25:

Date:

Use rectangles to draw a robot with specified perimeter measurements, and reason about the different areas that may be produced.



В	Multiply or divide.	Improvemer	nt	# Correct
1	1 x 6 =	23	x 6 = 12	
2	2 x 6 =	24	x 6 = 60	
3	3 x 6 =	25	x 6 = 18	
4	4 x 6 =	26	12 ÷ 6 =	
5	5 x 6 =	27	6 ÷ 6 =	
6	18 ÷ 6 =	28	60 ÷ 6 =	
7	12 ÷ 6 =	29	30 ÷ 6 =	
8	24 ÷ 6 =	30	18 ÷ 6 =	
9	6 ÷ 6 =	31	x 6 = 18	
10	30 ÷ 6 =	32	x 6 = 24	
11	10 x 6 =	33	x 6 = 54	
12	6 x 6 =	34	x 6 = 42	
13	7 x 6 =	35	48 ÷ 6 =	
14	8 x 6 =	36	54 ÷ 6 =	
15	9 x 6 =	37	36 ÷ 6 =	
16	42 ÷ 6 =	38	42 ÷ 6 =	
17	36 ÷ 6 =	39	11 x 6 =	
18	48 ÷ 6 =	40	66 ÷ 6 =	
19	60 ÷ 6 =	41	12 x 6 =	
20	54 ÷ 6 =	42	72 ÷ 6 =	
21	x 6 = 6	43	13 x 6 =	
22	x 6 = 30	44	78 ÷ 6 =	



Lesson 25:

Date:

Use rectangles to draw a robot with specified perimeter measurements, and reason about the different areas that may be produced.



Lesson 26:

Date:

Use rectangles to draw a robot with specified perimeter measurements, and reason about the different areas that may be produced. 1/29/14

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

	Multiply or divide.			
1	2 x 7 =	23	x 7 = 70	
2	3 x 7 =	24	x 7 = 14	
3	4 x 7 =	25	x 7 = 21	
4	5 x 7 =	26	70 ÷ 7 =	
5	1 x 7 =	27	35 ÷ 7 =	
6	14 ÷ 7 =	28	7 ÷ 7 =	
7	21 ÷ 7 =	29	14 ÷ 7 =	
8	35 ÷ 7 =	30	21 ÷ 7 =	
9	7 ÷ 7 =	31	x 7 = 42	
10	28 ÷ 7 =	32	x 7 = 49	
11	6 x 7 =	33	x 7 = 63	
12	7 x 7 =	34	x 7 = 56	
13	8 x 7 =	35	49 ÷ 7 =	
14	9 x 7 =	36	63 ÷ 7 =	
15	10 x 7 =	37	42 ÷ 7 =	
16	56 ÷ 7 =	38	56 ÷ 7 =	
17	49 ÷ 7 =	39	11 x 7 =	
18	63 ÷ 7 =	40	77 ÷ 7 =	
19	42 ÷ 7 =	41	12 x 7 =	
20	70 ÷ 7 =	42	84 ÷ 7 =	
21	x 7 = 35	43	14 x 7 =	
22	x 7 = 7	44	98 ÷ 7 =	



Lesson 27:

Use rectangles to draw a robot with specified perimeter measurements, and reason about the different areas that may be  $% \left\{ \left( 1\right) \right\} =\left\{ \left($ produced.



7.E.50

1/29/14

В	Multiply or divide.	Improvement	t	# Correct
1	1 x 7 =	23	x 7 = 14	
2	2 x 7 =	24	x 7 = 70	
3	3 x 7 =	25	x 7 = 21	
4	4 x 7 =	26	14 ÷ 7 =	
5	5 x 7 =	27	7 ÷ 7 =	
6	21 ÷ 7 =	28	70 ÷ 7 =	
7	14 ÷ 7 =	29	35 ÷ 7 =	
8	28 ÷ 7 =	30	21 ÷ 7 =	
9	7 ÷ 7 =	31	x 7 = 21	
10	35 ÷ 7 =	32	x 7 = 28	
11	10 x 7 =	33	x 7 = 63	
12	6 x 7 =	34	x 7 = 49	
13	7 x 7 =	35	56 ÷ 7 =	
14	8 x 7 =	36	63 ÷ 7 =	
15	9 x 7 =	37	42 ÷ 7 =	
16	49 ÷ 7 =	38	49 ÷ 7 =	
17	42 ÷ 7 =	39	11 x 7 =	
18	56 ÷ 7 =	40	77 ÷ 7 =	
19	70 ÷ 7 =	41	12 x 7 =	
20	63 ÷ 7 =	42	84 ÷ 7 =	
21	x 7 = 7	43	13 x 7 =	
22	x 7 = 35	44	91 ÷ 7 =	



Lesson 27:

Use rectangles to draw a robot with specified perimeter measurements, and reason about the different areas that may be  $% \left\{ \left( 1\right) \right\} =\left\{ \left($ produced.



7.E.51

### Multiply.



Lesson 28:

Solve a variety of word problems involving area and perimeter using all four operations.

1/29/14



В	Multiply or divido	Improvemen	t	# Correct
1	Multiply or divide.  1 x 8 =	23	x 8 = 16	
2	2 x 8 =	24	x 8 = 80	
3	3 x 8 =	25	x 8 = 24	
4	4 x 8 =	26	16 ÷ 8 =	
5	5 x 8 =	27	8 ÷ 8 =	
6	24 ÷ 8 =	28	80 ÷ 8 =	
7	16 ÷ 8 =	29	40 ÷ 8 =	
8	32 ÷ 8 =	30	24 ÷ 8 =	
9	8 ÷ 8 =	31	x 8 = 24	
10	40 ÷ 8 =	32	x 8 = 32	
11	10 x 8 =	33	x 8 = 72	
12	6 x 8 =	34	x 8 = 56	
13	7 x 8 =	35	64 ÷ 8 =	
14	8 x 8 =	36	72 ÷8 =	
15	9 x 8 =	37	48 ÷ 8 =	
16	56 ÷ 8 =	38	56 ÷ 8 =	
17	48 ÷ 8 =	39	11 x 8 =	
18	64 ÷ 8 =	40	88 ÷ 8 =	
19	80 ÷ 8 =	41	12 x 8 =	
20	72 ÷8 =	42	96 ÷ 8 =	
21	x 8 = 8	43	13 x 8 =	
22	x 8 = 40	44	104 ÷ 8 =	
				<u> </u>



Lesson 29:

1/29/14

Solve a variety of word problems involving area and perimeter using all four operations.

engage<sup>ny</sup>

#### Multiply.

Lesson 30: Date:

Share and critique peer strategies for problem solving. 1/29/14



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

	Multiply or divide.				
1	2 x 9 =	2	3	x 9 = 90	
2	3 x 9 =	24	4	x 9 = 18	
3	4 x 9 =	2	5	x 9 = 27	
4	5 x 9 =	2	6	90 ÷ 9 =	
5	1 x 9 =	2	7	45 ÷ 9 =	
6	18 ÷ 9 =	2	8	9 ÷ 9 =	
7	27 ÷ 9 =	2	9	18 ÷ 9 =	
8	45 ÷ 9 =	3	0	27 ÷ 9 =	
9	9 ÷ 9 =	3	1	x 9 = 54	
10	36 ÷ 9 =	33	2	x 9 = 63	
11	6 x 9 =	3:	3	x 9 = 81	
12	7 x 9 =	3.	4	x 9 = 72	
13	8 x 9 =	3.	5	63 ÷ 9 =	
14	9 x 9 =	30	6	81 ÷ 9 =	
15	10 x 9 =	3	7	54 ÷ 9 =	
16	72 ÷ 9 =	3	8	72 ÷ 9 =	
17	63 ÷ 9 =	3	9	11 x 9 =	
18	81 ÷ 9 =	4	0	99 ÷ 9 =	
19	54 ÷ 9 =	4	1	12 x 9 =	
20	90 ÷ 9 =	4:	2	108 ÷ 9 =	
21	x 9 = 45	4	3	14 x 9 =	
22	x 9 = 9	4	4	126 ÷ 9 =	



Lesson 31: Date:

Explore and create unconventional representations of one-half. 1/29/14



В	Multiply or divide.	Improvemer	nt	# Correct
1	1 x 9 =	23	x 9 = 18	
2	2 x 9 =	24	x 9 = 90	
3	3 x 9 =	25	x 9 = 27	
4	4 x 9 =	26	18 ÷ 9 =	
5	5 x 9 =	27	9 ÷ 9 =	
6	27 ÷ 9 =	28	90 ÷ 9 =	
7	18 ÷ 9 =	29	45 ÷ 9 =	
8	36 ÷ 9 =	30	27 ÷ 9 =	
9	9 ÷ 9 =	31	x 9 = 27	
10	45 ÷ 9 =	32	x 9 = 36	
11	10 x 9 =	33	x 9 = 81	
12	6 x 9 =	34	x 9 = 63	
13	7 x 9 =	35	72 ÷ 9 =	
14	8 x 9 =	36	81 ÷ 9 =	
15	9 x 9 =	37	54 ÷ 9 =	
16	63 ÷ 9 =	38	63 ÷ 9 =	
17	54 ÷ 9 =	39	11 x 9 =	
18	72 ÷ 9 =	40	99 ÷ 9 =	
19	90 ÷ 9 =	41	12 x 9 =	
20	81 ÷ 9 =	42	108 ÷ 9 =	
21	x 9 = 9	43	13 x 9 =	
22	x 9 = 45	44	117 ÷ 9 =	



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

^	Multiply.		# Ooncot
1	2 x 1 =	23	2 x 7 =
2	2 x 2 =	24	5 x 5 =
3	2 x 3 =	25	5 x 6 =
4	4 x 1 =	26	5 x 7 =
5	4 x 2 =	27	4 x 5 =
6	4 x 3 =	28	4 x 6 =
7	1 x 6 =	29	4 x 7 =
8	2 x 6 =	30	3 x 5 =
9	1 x 8 =	31	3 x 6 =
10	2 x 8 =	32	3 x 7 =
11	3 x 1 =	33	2 x 7 =
12	3 x 2 =	34	2 x 8 =
13	3 x 3 =	35	2 x 9 =
14	5 x 1 =	36	5 x 7 =
15	5 x 2 =	37	5 x 8 =
16	5 x 3 =	38	5 x 9 =
17	1 x 7 =	39	4 x 7 =
18	2 x 7 =	40	4 x 8 =
19	1 x 9 =	41	4 x 9 =
20	2 x 9 =	42	3 x 7 =
21	2 x 5 =	43	3 x 8 =
22	2 x 6 =	44	3 x 9 =



Lesson 32: Date:

Explore and create unconventional representations of one-half. 1/29/14



В	Multiply.	Improvement	# Correct
1	5 x 1 =	23 5 x 7 =	=
2	5 x 2 =	24 2 x 5 =	=
3	5 x 3 =	25 2 x 6 =	=
4	3 x 1 =	26 2 x 7 =	=
5	3 x 2 =	27 3 x 5 =	=
6	3 x 3 =	28 3 x 6 =	=
7	1 x 7 =	29 3 x 7 =	=
8	2 x 7 =	30 4 x 5 =	=
9	1 x 9 =	31 4 x 6 =	=
10	2 x 9 =	32 4 x 7 =	=
11	2 x 1 =	33 5 x 7 =	=
12	2 x 2 =	34 5 x 8 =	=
13	2 x 3 =	35 5 x 9 =	=
14	4 x 1 =	36 2 x 7 =	=
15	4 x 2 =	37 2 x 8 =	=
16	4 x 3 =	38 2 x 9 =	=
17	1 x 6 =	39 3 x 7 =	=
18	2 x 6 =	40 3 x 8 =	=
19	1 x 8 =	41 3 x 9 =	=
20	2 x 8 =	42 4 x 7 =	=
21	5 x 5 =	43 4 x 8 =	=
22	5 x 6 =	44 4 x 9 =	=



Lesson 32: Date:

Explore and create unconventional representations of one-half. 1/29/14



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

	Divide.		
1	4 ÷ 2 =	23	16 ÷ 8 =
2	6 ÷ 2 =	24	40 ÷ 8 =
3	10 ÷ 2 =	25	32 ÷ 8 =
4	20 ÷ 2 =	26	56 ÷ 8 =
5	10 ÷ 5 =	27	18 ÷ 9 =
6	15 ÷ 5 =	28	45 ÷ 9 =
7	25 ÷ 5 =	29	36 ÷ 9 =
8	20 ÷ 5 =	30	63 ÷ 9 =
9	8 ÷ 4 =	31	64 ÷ 8 =
10	12 ÷ 4 =	32	48 ÷ 8 =
11	20 ÷ 4 =	33	81 ÷ 9 =
12	16 ÷ 4 =	34	54 ÷ 9 =
13	6 ÷ 3 =	35	24 ÷ 6 =
14	9 ÷ 3 =	36	16 ÷ 2 =
15	15 ÷ 3 =	37	28 ÷ 7 =
16	12 ÷ 3 =	38	27 ÷ 3 =
17	60 ÷ 6 =	39	24 ÷ 8 =
18	12 ÷ 6 =	40	32 ÷ 4 =
19	18 ÷ 6 =	41	27 ÷ 9 =
20	35 ÷ 7 =	42	72 ÷ 9 =
21	14 ÷ 7 =	43	56 ÷ 7 =
22	21 ÷ 7 =	44	72 ÷ 8 =



Lesson 33: Date:

Solidify fluency with Grade 3 skills. 1/29/14



В

Improvement \_\_\_\_\_

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

D			

	Divide.		_		
1	10 ÷ 5 =	23	3	18 ÷ 9 =	
2	15 ÷ 5 =	24	4	45 ÷ 9 =	
3	25 ÷ 5 =	25	5	27 ÷ 9 =	
4	50 ÷ 5 =	26	6	63 ÷ 9 =	
5	4 ÷ 2 =	27	7	16 ÷ 8 =	
6	6 ÷ 2 =	28	8	40 ÷ 8 =	
7	10 ÷ 2 =	29	9	24 ÷ 8 =	
8	8 ÷ 2 =	30	о	56 ÷ 8 =	
9	6 ÷ 3 =	3.	1	81 ÷ 9 =	
10	9 ÷ 3 =	32	2	54 ÷ 9 =	
11	15 ÷ 3 =	33	3	64 ÷ 8 =	
12	12 ÷ 3 =	34	4	48 ÷ 8 =	
13	8 ÷ 4 =	35	5	30 ÷ 6 =	
14	12 ÷ 4 =	36	6	18 ÷ 2 =	
15	20 ÷ 4 =	37	7	35 ÷ 7 =	
16	16 ÷ 4 =	38	8	24 ÷ 3 =	
17	70 ÷ 7 =	39	9	32 ÷ 8 =	
18	14 ÷ 7 =	40	0	36 ÷ 4 =	
19	21 ÷ 7 =	4	1	45 ÷ 9 =	
20	30 ÷ 6 =	42	2	72 ÷ 8 =	
21	12 ÷ 6 =	43	3	49 ÷ 7 =	
22	18 ÷ 6 =	44	4	72 ÷ 9 =	



Lesson 33: Date:

Solidify fluency with Grade 3 skills. 1/29/14



# Multiplication

Materials: (S) Personal white boards

- T: (Draw an array with 3 rows of 2.) Say the repeated addition sentence.
- S: 2 + 2 + 2 = 6.
- T: (Write 3 × \_\_\_\_ = \_\_\_\_.) On your personal board, complete the multiplication sentence.
- S: (Write  $3 \times 2 = 6$ .)

Repeat using the following ideas: 4 rows of 10, 3 rows of 4, 7 rows of 3, and 8 rows of 2. Or, you can think of your own.

# **Equal Groups**

Materials: (S) Personal white boards

- T: (Draw a picture with 2 groups of 4 circled.)
  Say the total as a repeated addition
  sentence.
- S: 4 + 4 = 8.
- T: Write a division sentence that means the number of groups is unknown.
- S: (Write  $8 \div 4 = 2$ .)
- T: Below that division sentence write a division sentence that means the number In each group is unknown.
- S: (Write  $8 \div 2 = 4$ .)

Repeat using the following ideas: 5 groups of 3, 3 groups of 4, and 6 groups of 2. Or, you can think of your own.

# **Commutative Multiplying**

Materials: (S) Personal white boards

- T: (Draw an array with 3 rows of 2 dots.) How many rows of 2 do you see?
- S: 3 rows of 2.
- T: Write four different multiplication sentences for the picture.
- S: (Write  $3 \times 2 = 6$ ,  $2 \times 3 = 6$ ,  $6 = 3 \times 2$ ,  $6 = 2 \times 3$ .)

Repeat using the following ideas: 3 rows of 5, and 4 rows of 3. Or, you can think of your own.

- T: (Write  $4 \times 2 = 2 \times ____$ .) On your board, fill in the blank.
- S: (Write  $4 \times 2 = 2 \times 4$ .)

Repeat using the following ideas:  $9 \times 5 = 5 \times$ \_\_\_ and  $3 \times 6 = 6 \times$ \_\_\_. Or, you can think of your own.

# **Tape Diagrams**

Materials: (S) Personal white boards

- T: (Draw a tape diagram with 5 equal units and 2 stars in the first unit.) What is the value of each unit?
- S: 2 stars.
- T: How many units are there?
- S: 5 units.
- T: Write a multiplication sentence for this tape diagram.
- S: (Write  $5 \times 2 = 10$ .)

Repeat using the following ideas:  $4 \times 3 = 12$ ,  $8 \div 4 = 2$ , and  $15 \div 3 = 5$ . Or, you can think of your own.



Lesson 33: Date: Solidify fluency with Grade 3 skills. 1/29/14



#### **Tens**

Materials: (S) Hide Zero Cards, personal white boards

Note: Hide Zero Cards can be made with index cards for personal practice.

T: (Write 7 tens = \_\_\_\_\_.) Say the number.

S: 70.

Repeat using the following ideas: 10 tens, 12 tens, 20 tens, 28 tens, 30 tens, and 37 tens. Or, you can think of your own.

7 0

150

**Hide Zero Cards** 

#### **Tens and Hundreds**

Materials: (S) Personal white boards

T: (Write  $9 + \underline{\hspace{1cm}} = 10$ .) Say the missing number.

S: 1

T: (Write  $90 + \underline{\hspace{1cm}} = 100$ .) Say the missing number.

S: 10

T: (Write  $91 + \underline{\hspace{1cm}} = 100$ .) Say the missing number.

S: 9

T: (Write 291 + = 300.) Say the missing number.

S: 9

Repeat using the following ideas:

Or, you can think of your own.

# **Make Twenty-Four Game**

Materials: Set of 6 cards per pair

Note: Students play in pairs. Each pair has a set of 6 cards, each with a number (2, 3, 4, 6, 8, and 12).

T: (Write \_\_\_ × \_\_\_ = 24.) Spread the cards out in front of you.

T: Put your hands behind your back. I'll put a number in the first blank. When you know the number that belongs in the second blank, touch the card that shows the number. The first one of us to touch the card keeps it. Whoever has the most cards at the end wins. (Write 12 in the first blank.)

S: (Touch the 2 card. The first to touch it keeps the card.)

Repeat but this time, you might make 36 with the same cards plus 9 and 18.

# Write In the Parentheses

Materials: (S) Personal white boards

T: (Write 10 - 5 + 3 = 8.) On your board, copy the equation. Then, insert parentheses to make the statement true.

S: (Write (10-5) + 3 = 8.)

Repeat using the following ideas:

$$10-5+3=2$$
,  $10=20-7+3$ ,  $16=20-7+3$ ,

$$8 + 2 \times 4 = 16$$
,  $8 + 2 \times 4 = 40$ ,  $12 = 12 \div 2 \times 2$ ,  $3 = 12 \div 2 \times 2$ ,  $10 = 35 - 5 \times 5$ , and  $20 - 10 \div 5 = 2$ .

Or, you can think of your own.

Lesson 33: Date: Solidify fluency with Grade 3 skills. 1/29/14



# Round Three- and Four-Digit Numbers (4 minutes)

Materials: (S) Personal white boards

- T: (Write  $87 \approx$  \_\_\_\_.) What is 87 rounded to the nearest ten?
- S: 90

Repeat using the following ideas: 97, 43, 643, 35, and 865. Or, you can think of your own.

- T: (Write  $253 \approx$  \_\_\_\_.) What is 253 rounded to the nearest hundred?
- S: 300

Repeat using the following ideas: 253, 1253, 735, 1735, 850, 1850, 952, 1371, and 1450. Or, you can think of your own.

# **Partition Shapes**

Materials: (S) Personal white boards

- T: Draw a square.
- S: (Draw square.)
- T: (Write  $\frac{1}{2}$ .) Estimate to equally partition the square into halves.
- S: (Partition.)

Repeat using the following ideas: line  $\frac{1}{5}$ , circle  $\frac{1}{4}$ , circle  $\frac{1}{8}$ , bar  $\frac{1}{10}$ , and bar  $\frac{1}{6}$ .

Or, you can think of your own.

# Write the Unit Fraction

Materials: (S) Personal white boards

- T: (Draw a shape with  $\frac{1}{2}$  shaded.) Write the unit fraction
- S: (Write  $\frac{1}{2}$ .)

Repeat using the following ideas:  $\frac{1}{4}$ ,  $\frac{1}{8}$ ,  $\frac{1}{6}$ ,  $\frac{1}{10}$ , and  $\frac{1}{5}$ . Or, you can think of your own.

#### Greater or Less than 1?

- T: (Write  $\frac{1}{2}$ .) Greater or less than 1?
- S: Less!

Repeat using the following ideas:  $\frac{3}{2}$ ,  $\frac{5}{4}$ ,  $\frac{3}{4}$ ,  $\frac{3}{7}$ ,  $\frac{5}{3}$ , and  $\frac{5}{2}$ .

Or, you can think of your own.

#### **Draw Fractions from Part to Whole**

Materials: (S) Personal white boards

- T: Draw 1 unit on your personal board.
- S: (Draw 1 unit.)
- T: Label the unit  $\frac{1}{3}$ . Now, draw the whole that goes with your unit of  $\frac{1}{3}$ .

Repeat using the following ideas:  $\frac{1}{5}$ ,  $\frac{1}{6}$ ,  $\frac{1}{4}$ , and  $\frac{1}{2}$ .

Or, you can think of your own.

#### **Draw Number Bonds of One**

Materials: (S) Personal white boards



- T: Draw a number bond to partition one into halves.
- S: (Write.)
- T: How many copies of 1 half did you draw to make one?
- S: 2 copies.

Repeat with the following ideas: thirds, fourths, fifths, sixths, sevenths, etc. Or, you can think of your own.



Lesson 33: Date: Solidify fluency with Grade 3 skills. 1/29/14



# Correct

	Multiply or divide.			
1	3 x 2 =	23	2 x 7 =	
2	6 ÷ 2 =	24	3 x 8 =	
3	5 x 3 =	25	4 x 9 =	
4	15 ÷ 5 =	26	5 x 7	
5	4 x 2 =	27	36 ÷ 6 =	
6	8 ÷ 4 =	28	42 ÷ 7 =	
7	3 x 3 =	29	64 ÷ 8 =	
8	9 ÷ 3 =	30	45 ÷ 9 =	
9	4 x 3 =	31	2 x 8 =	
10	12 ÷ 4 =	32	3 x 9 =	
11	5 x 5 =	33	32 ÷ 4 =	
12	25 ÷ 5 =	34	45 ÷ 5 =	
13	6 x 2 =	35	6 x 7 =	
14	21 ÷ 7 =	36	7 x 7 =	
15	7 x 4 =	37	56 ÷ 8 =	
16	16 ÷ 8 =	38	63 ÷ 9 =	
17	18 ÷ 3 =	39	6 x 6 =	
18	18 ÷ 9 =	40	8 x 8 =	
19	8 x 3 =	41	81 ÷ 9 =	
20	36 ÷ 9 =	42	49 ÷ 7 =	
21	14 ÷ 7 =	43	54 ÷ 6 =	
22	6 x 4 =	44	56 ÷ 7 =	



Lesson 34: Date:

Create resource booklets to support fluency with Grade 3 skills. 1/29/14



В	Multiply or divide	Improvement	# Correct	
	Multiply or divide			

	Multiply or divide.			
1	5 x 2 =	23	2 x 7 =	
2	10 ÷ 2 =	24	3 x 8 =	
3	2 x 3 =	25	4 x 9 =	
4	6 ÷ 3 =	26	5 x 7 =	
5	3 x 2 =	27	36 ÷ 6 =	
6	6 ÷ 2 =	28	42 ÷ 7 =	
7	4 x 4 =	29	64 ÷ 8 =	
8	16 ÷ 4 =	30	45 ÷ 9 =	
9	3 x 4 =	31	2 x 8 =	
10	12 ÷ 3 =	32	3 x 9 =	
11	3 x 3 =	33	32 ÷ 4 =	
12	9 ÷ 3 =	34	45 ÷ 5 =	
13	7 x 2 =	35	6 x 7 =	
14	18 ÷ 6 =	36	7 x 7 =	
15	6 x 4 =	37	56 ÷ 8 =	
16	18 ÷ 9 =	38	63 ÷ 9 =	
17	21 ÷ 3 =	39	6 x 6 =	
18	16 ÷ 8 =	40	8 x 8 =	
19	9 x 3 =	41	81 ÷ 9 =	
20	32 ÷ 8 =	42	49 ÷ 7 =	
21	12 ÷ 6 =	43	54 ÷ 6 =	
22	7 x 4 =	44	56 ÷ 7 =	