A

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 =	

© Bill Davidson

B
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 =	

© Bill Davidson

A

Correct _____

Multiply.

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 =	

© Bill Davidson

COMMON CORE

engage^{ny}

3.A.19

B

Improvement _____   # Correct _____

Multiply.

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 =	

© Bill Davidson

COMMON CORE

Lesson 2: Apply the distributive and commutative properties to relate
multiplication facts 5 x n + n to 6 x n and n x 6 where n is the
size of the unit.

Date: 7/31/13

engageny   3.A.20

A

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 =	

© Bill Davidson

COMMON CORE

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

engage^{ny}

3.D.21

B

Improvement _____   # Correct _____

Multiply or divide.

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 =	

© Bill Davidson

COMMON CORE | **Lesson 13:** | Identify and use arithmetic patterns to multiply.
| **Date:** | 7/31/13

engage^{ny} 3.D.22

A   # Correct _____

Multiply or divide.

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 =	

© Bill Davidson

Lesson 16: Reason about and explain arithmetic patterns using units of 0 and 1 as they relate to multiplication and division.

Date: 7/31/13

COMMON CORE

engage^ny   3.E.8

B

Multiply or divide.

Improvement _____   # 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 =	

© Bill Davidson

engage^{ny}   3.E.9

A   # Correct _____

Complete the number sentence.

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	

© Bill Davidson

engage^{ny}   3.E.30

B

Improvement _____   # Correct _____

Complete the number sentence.

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	
22	4 x __ = 0		44	42 x __ = 0	

© Bill Davidson

COMMON CORE

Lesson 18: Solve two-step word problems involving all four operations and assess the reasonableness of solutions.

Date: 7/31/13

engageny   **3.E.31**

A

Correct _____

Multiply.

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 =	

© Bill Davidson

COMMON CORE	**Lesson 21:**	Solve two-step word problems involving multiplying single-digit factors and multiples of 10.	engage^ny	3.F.27
	Date:	7/31/13		

B

Improvement _____   # Correct _____

Multiply.

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 =	

© Bill Davidson

COMMON CORE	**Lesson 21:**	Solve two-step word problems involving multiplying single-digit factors and multiples of 10.
	Date:	7/31/13

engage^{ny}   **3.F.28**