Eureka Math™

Grade 3, Module 3

Student File_B

*Contains Sprint and Fluency, Exit Ticket,
and Assessment Materials*

Sprint and Fluency Packet

A

Number Correct: _____

Mixed Multiplication

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

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Lesson 1: Study commutativity to find known facts of 6, 7, 8, and 9.

1

B

Number Correct: _____

Improvement: _____

Mixed Multiplication

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

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Lesson 1: Study commutativity to find known facts of 6, 7, 8, and 9.

2

A

Number Correct: _____

Use the Commutative Property to Multiply

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

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

3

B

Use the Commutative Property to Multiply

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

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

4

Multiply.

6 x 1 = _____	6 x 2 = _____	6 x 3 = _____	6 x 4 = _____
6 x 5 = _____	6 x 1 = _____	6 x 2 = _____	6 x 1 = _____
6 x 3 = _____	6 x 1 = _____	6 x 4 = _____	6 x 1 = _____
6 x 5 = _____	6 x 1 = _____	6 x 2 = _____	6 x 3 = _____
6 x 2 = _____	6 x 4 = _____	6 x 2 = _____	6 x 5 = _____
6 x 2 = _____	6 x 1 = _____	6 x 2 = _____	6 x 3 = _____
6 x 1 = _____	6 x 3 = _____	6 x 2 = _____	6 x 3 = _____
6 x 4 = _____	6 x 3 = _____	6 x 5 = _____	6 x 3 = _____
6 x 4 = _____	6 x 1 = _____	6 x 4 = _____	6 x 2 = _____
6 x 4 = _____	6 x 3 = _____	6 x 4 = _____	6 x 5 = _____
6 x 4 = _____	6 x 5 = _____	6 x 1 = _____	6 x 5 = _____
6 x 2 = _____	6 x 5 = _____	6 x 3 = _____	6 x 5 = _____
6 x 4 = _____	6 x 2 = _____	6 x 4 = _____	6 x 3 = _____
6 x 5 = _____	6 x 3 = _____	6 x 2 = _____	6 x 4 = _____
6 x 3 = _____	6 x 5 = _____	6 x 2 = _____	6 x 4 = _____

multiply by 6 (1–5)

Multiply.

6 x 1 = _____   6 x 2 = _____   6 x 3 = _____   6 x 4 = _____

6 x 5 = _____   6 x 6 = _____   6 x 7 = _____   6 x 8 = _____

6 x 9 = _____   6 x 10 = _____   6 x 5 = _____   6 x 6 = _____

6 x 5 = _____   6 x 7 = _____   6 x 5 = _____   6 x 8 = _____

6 x 5 = _____   6 x 9 = _____   6 x 5 = _____   6 x 10 = _____

6 x 6 = _____   6 x 5 = _____   6 x 6 = _____   6 x 7 = _____

6 x 6 = _____   6 x 8 = _____   6 x 6 = _____   6 x 9 = _____

6 x 6 = _____   6 x 7 = _____   6 x 6 = _____   6 x 7 = _____

6 x 8 = _____   6 x 7 = _____   6 x 9 = _____   6 x 7 = _____

6 x 8 = _____   6 x 6 = _____   6 x 8 = _____   6 x 7 = _____

6 x 8 = _____   6 x 9 = _____   6 x 9 = _____   6 x 6 = _____

6 x 9 = _____   6 x 7 = _____   6 x 9 = _____   6 x 8 = _____

6 x 9 = _____   6 x 8 = _____   6 x 6 = _____   6 x 9 = _____

6 x 7 = _____   6 x 9 = _____   6 x 6 = _____   6 x 8 = _____

6 x 9 = _____   6 x 7 = _____   6 x 6 = _____   6 x 8 = _____

multiply by 6 (6–10)

Lesson 6:   Use the distributive property as a strategy to multiply and divide using units of 6 and 7.

Multiply.

7 x 1 = _____	7 x 2 = _____	7 x 3 = _____	7 x 4 = _____
7 x 5 = _____	7 x 1 = _____	7 x 2 = _____	7 x 1 = _____
7 x 3 = _____	7 x 1 = _____	7 x 4 = _____	7 x 1 = _____
7 x 5 = _____	7 x 1 = _____	7 x 2 = _____	7 x 3 = _____
7 x 2 = _____	7 x 4 = _____	7 x 2 = _____	7 x 5 = _____
7 x 2 = _____	7 x 1 = _____	7 x 2 = _____	7 x 3 = _____
7 x 1 = _____	7 x 3 = _____	7 x 2 = _____	7 x 3 = _____
7 x 4 = _____	7 x 3 = _____	7 x 5 = _____	7 x 3 = _____
7 x 4 = _____	7 x 1 = _____	7 x 4 = _____	7 x 2 = _____
7 x 4 = _____	7 x 3 = _____	7 x 4 = _____	7 x 5 = _____
7 x 4 = _____	7 x 5 = _____	7 x 1 = _____	7 x 5 = _____
7 x 2 = _____	7 x 5 = _____	7 x 3 = _____	7 x 5 = _____
7 x 4 = _____	7 x 2 = _____	7 x 4 = _____	7 x 3 = _____
7 x 5 = _____	7 x 3 = _____	7 x 2 = _____	7 x 4 = _____
7 x 3 = _____	7 x 5 = _____	7 x 2 = _____	7 x 4 = _____

multiply by 7 (1–5)

Multiply.

7 x 1 = _____	7 x 2 = _____	7 x 3 = _____	7 x 4 = _____
7 x 5 = _____	7 x 6 = _____	7 x 7 = _____	7 x 8 = _____
7 x 9 = _____	7 x 10 = _____	7 x 5 = _____	7 x 6 = _____
7 x 5 = _____	7 x 7 = _____	7 x 5 = _____	7 x 8 = _____
7 x 5 = _____	7 x 9 = _____	7 x 5 = _____	7 x 10 = _____
7 x 6 = _____	7 x 5 = _____	7 x 6 = _____	7 x 7 = _____
7 x 6 = _____	7 x 8 = _____	7 x 6 = _____	7 x 9 = _____
7 x 6 = _____	7 x 7 = _____	7 x 6 = _____	7 x 7 = _____
7 x 8 = _____	7 x 7 = _____	7 x 9 = _____	7 x 7 = _____
7 x 8 = _____	7 x 6 = _____	7 x 8 = _____	7 x 7 = _____
7 x 8 = _____	7 x 9 = _____	7 x 9 = _____	7 x 6 = _____
7 x 9 = _____	7 x 7 = _____	7 x 9 = _____	7 x 8 = _____
7 x 9 = _____	7 x 8 = _____	7 x 6 = _____	7 x 9 = _____
7 x 7 = _____	7 x 9 = _____	7 x 6 = _____	7 x 8 = _____
7 x 9 = _____	7 x 7 = _____	7 x 6 = _____	7 x 8 = _____

multiply by 7 (6–10)

Multiply.

8 x 1 = _____   8 x 2 = _____   8 x 3 = _____   8 x 4 = _____

8 x 5 = _____   8 x 1 = _____   8 x 2 = _____   8 x 1 = _____

8 x 3 = _____   8 x 1 = _____   8 x 4 = _____   8 x 1 = _____

8 x 5 = _____   8 x 1 = _____   8 x 2 = _____   8 x 3 = _____

8 x 2 = _____   8 x 4 = _____   8 x 2 = _____   8 x 5 = _____

8 x 2 = _____   8 x 1 = _____   8 x 2 = _____   8 x 3 = _____

8 x 1 = _____   8 x 3 = _____   8 x 2 = _____   8 x 3 = _____

8 x 4 = _____   8 x 3 = _____   8 x 5 = _____   8 x 3 = _____

8 x 4 = _____   8 x 1 = _____   8 x 4 = _____   8 x 2 = _____

8 x 4 = _____   8 x 3 = _____   8 x 4 = _____   8 x 5 = _____

8 x 4 = _____   8 x 5 = _____   8 x 1 = _____   8 x 5 = _____

8 x 2 = _____   8 x 5 = _____   8 x 3 = _____   8 x 5 = _____

8 x 4 = _____   8 x 2 = _____   8 x 4 = _____   8 x 3 = _____

8 x 5 = _____   8 x 3 = _____   8 x 2 = _____   8 x 4 = _____

8 x 3 = _____   8 x 5 = _____   8 x 2 = _____   8 x 4 = _____

multiply by 8 (1–5)

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9

Multiply.

8 x 1 = _____   8 x 2 = _____   8 x 3 = _____   8 x 4 = _____

8 x 5 = _____   8 x 6 = _____   8 x 7 = _____   8 x 8 = _____

8 x 9 = _____   8 x 10 = _____   8 x 5 = _____   8 x 6 = _____

8 x 5 = _____   8 x 7 = _____   8 x 5 = _____   8 x 8 = _____

8 x 5 = _____   8 x 9 = _____   8 x 5 = _____   8 x 10 = _____

8 x 6 = _____   8 x 5 = _____   8 x 6 = _____   8 x 7 = _____

8 x 6 = _____   8 x 8 = _____   8 x 6 = _____   8 x 9 = _____

8 x 6 = _____   8 x 7 = _____   8 x 6 = _____   8 x 7 = _____

8 x 8 = _____   8 x 7 = _____   8 x 9 = _____   8 x 7 = _____

8 x 8 = _____   8 x 6 = _____   8 x 8 = _____   8 x 7 = _____

8 x 8 = _____   8 x 9 = _____   8 x 9 = _____   8 x 6 = _____

8 x 9 = _____   8 x 7 = _____   8 x 9 = _____   8 x 8 = _____

8 x 9 = _____   8 x 8 = _____   8 x 6 = _____   8 x 9 = _____

8 x 7 = _____   8 x 9 = _____   8 x 6 = _____   8 x 8 = _____

8 x 9 = _____   8 x 7 = _____   8 x 6 = _____   8 x 8 = _____

multiply by 8 (6–10)

Lesson 12:   Apply the distributive property and the fact 9 = 10 – 1 as a strategy to multiply.

A

Number Correct: _____

Multiply or divide by 8

1.	2 × 8 =	
2.	3 × 8 =	
3.	4 × 8 =	
4.	5 × 8 =	
5.	1 × 8 =	
6.	16 ÷ 8 =	
7.	24 ÷ 8 =	
8.	40 ÷ 8 =	
9.	8 ÷ 1 =	
10.	32 ÷ 8 =	
11.	6 × 8 =	
12.	7 × 8 =	
13.	8 × 8 =	
14.	9 × 8 =	
15.	10 × 8 =	
16.	64 ÷ 8 =	
17.	56 ÷ 8 =	
18.	72 ÷ 8 =	
19.	48 ÷ 8 =	
20.	80 ÷ 8 =	
21.	_____ × 8 = 40	
22.	_____ × 8 = 16	

23.	_____ × 8 = 80	
24.	_____ × 8 = 32	
25.	_____ × 8 = 24	
26.	80 ÷ 8 =	
27.	40 ÷ 8 =	
28.	8 ÷ 1 =	
29.	16 ÷ 8 =	
30.	24 ÷ 8 =	
31.	_____ × 8 = 48	
32.	_____ × 8 = 56	
33.	_____ × 8 = 72	
34.	_____ × 8 = 64	
35.	56 ÷ 8 =	
36.	72 ÷ 8 =	
37.	48 ÷ 8 =	
38.	64 ÷ 8 =	
39.	11 × 8 =	
40.	88 ÷ 8 =	
41.	12 × 8 =	
42.	96 ÷ 8 =	
43.	14 × 8 =	
44.	112 ÷ 8 =	

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Lesson 13: Identify and use arithmetic patterns to multiply.

B

Multiply or divide by 8

1.	1 × 8 =	
2.	2 × 8 =	
3.	3 × 8 =	
4.	4 × 8 =	
5.	5 × 8 =	
6.	24 ÷ 8 =	
7.	16 ÷ 8 =	
8.	32 ÷ 8 =	
9.	8 ÷ 1 =	
10.	40 ÷ 8 =	
11.	10 × 8 =	
12.	6 × 8 =	
13.	7 × 8 =	
14.	8 × 8 =	
15.	9 × 8 =	
16.	56 ÷ 8 =	
17.	48 ÷ 8 =	
18.	64 ÷ 8 =	
19.	80 ÷ 8 =	
20.	72 ÷ 8 =	
21.	_____ × 8 = 16	
22.	_____ × 8 = 40	

23.	_____ × 8 = 48	
24.	_____ × 8 = 80	
25.	_____ × 8 = 24	
26.	16 ÷ 8 =	
27.	8 ÷ 1 =	
28.	80 ÷ 8 =	
29.	40 ÷ 8 =	
30.	24 ÷ 8 =	
31.	_____ × 8 = 64	
32.	_____ × 8 = 32	
33.	_____ × 8 = 72	
34.	_____ × 8 = 56	
35.	64 ÷ 8 =	
36.	72 ÷ 8 =	
37.	48 ÷ 8 =	
38.	56 ÷ 8 =	
39.	11 × 8 =	
40.	88 ÷ 8 =	
41.	12 × 8 =	
42.	96 ÷ 8 =	
43.	13 × 8 =	
44.	104 ÷ 8 =	

Lesson 13: Identify and use arithmetic patterns to multiply.

Multiply.

9 x 1 = _____	9 x 2 = _____	9 x 3 = _____	9 x 4 = _____
9 x 5 = _____	9 x 1 = _____	9 x 2 = _____	9 x 1 = _____
9 x 3 = _____	9 x 1 = _____	9 x 4 = _____	9 x 1 = _____
9 x 5 = _____	9 x 1 = _____	9 x 2 = _____	9 x 3 = _____
9 x 2 = _____	9 x 4 = _____	9 x 2 = _____	9 x 5 = _____
9 x 2 = _____	9 x 1 = _____	9 x 2 = _____	9 x 3 = _____
9 x 1 = _____	9 x 3 = _____	9 x 2 = _____	9 x 3 = _____
9 x 4 = _____	9 x 3 = _____	9 x 5 = _____	9 x 3 = _____
9 x 4 = _____	9 x 1 = _____	9 x 4 = _____	9 x 2 = _____
9 x 4 = _____	9 x 3 = _____	9 x 4 = _____	9 x 5 = _____
9 x 4 = _____	9 x 5 = _____	9 x 1 = _____	9 x 5 = _____
9 x 2 = _____	9 x 5 = _____	9 x 3 = _____	9 x 5 = _____
9 x 4 = _____	9 x 2 = _____	9 x 4 = _____	9 x 3 = _____
9 x 5 = _____	9 x 3 = _____	9 x 2 = _____	9 x 4 = _____
9 x 3 = _____	9 x 5 = _____	9 x 2 = _____	9 x 4 = _____

multiply by 9 (1–5)

Multiply.

9 x 1 = _____	9 x 2 = _____	9 x 3 = _____	9 x 4 = _____
9 x 5 = _____	9 x 6 = _____	9 x 7 = _____	9 x 8 = _____
9 x 9 = _____	9 x 10 = _____	9 x 5 = _____	9 x 6 = _____
9 x 5 = _____	9 x 7 = _____	9 x 5 = _____	9 x 8 = _____
9 x 5 = _____	9 x 9 = _____	9 x 5 = _____	9 x 10 = _____
9 x 6 = _____	9 x 5 = _____	9 x 6 = _____	9 x 7 = _____
9 x 6 = _____	9 x 8 = _____	9 x 6 = _____	9 x 9 = _____
9 x 6 = _____	9 x 7 = _____	9 x 6 = _____	9 x 7 = _____
9 x 8 = _____	9 x 7 = _____	9 x 9 = _____	9 x 7 = _____
9 x 8 = _____	9 x 6 = _____	9 x 8 = _____	9 x 7 = _____
9 x 8 = _____	9 x 9 = _____	9 x 9 = _____	9 x 6 = _____
9 x 9 = _____	9 x 7 = _____	9 x 9 = _____	9 x 8 = _____
9 x 9 = _____	9 x 8 = _____	9 x 6 = _____	9 x 9 = _____
9 x 7 = _____	9 x 9 = _____	9 x 6 = _____	9 x 8 = _____
9 x 9 = _____	9 x 7 = _____	9 x 6 = _____	9 x 8 = _____

multiply by 9 (6–10)

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Lesson 15:   Interpret the unknown in multiplication and division to model and solve problems.

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14

A

Number Correct: _____

Multiply or divide by 9

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

15

B

Multiply or divide by 9

1.	1 × 9 =	
2.	2 × 9 =	
3.	3 × 9 =	
4.	4 × 9 =	
5.	5 × 9 =	
6.	27 ÷ 9 =	
7.	18 ÷ 9 =	
8.	36 ÷ 9 =	
9.	9 ÷ 9 =	
10.	45 ÷ 9 =	
11.	10 × 9 =	
12.	6 × 9 =	
13.	7 × 9 =	
14.	8 × 9 =	
15.	9 × 9 =	
16.	63 ÷ 9 =	
17.	54 ÷ 9 =	
18.	72 ÷ 9 =	
19.	90 ÷ 9 =	
20.	81 ÷ 9 =	
21.	_____ × 9 = 9	
22.	_____ × 9 = 45	

23.	_____ × 9 = 18	
24.	_____ × 9 = 90	
25.	_____ × 9 = 27	
26.	18 ÷ 9 =	
27.	9 ÷ 9 =	
28.	90 ÷ 9 =	
29.	45 ÷ 9 =	
30.	27 ÷ 9 =	
31.	_____ × 9 = 27	
32.	_____ × 9 = 36	
33.	_____ × 9 = 81	
34.	_____ × 9 = 63	
35.	72 ÷ 9 =	
36.	81 ÷ 9 =	
37.	54 ÷ 9 =	
38.	63 ÷ 9 =	
39.	11 × 9 =	
40.	99 ÷ 9 =	
41.	12 × 9 =	
42.	108 ÷ 9 =	
43.	13 × 9 =	
44.	117 ÷ 9 =	

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

16

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A

Number Correct: _____

Multiply and Divide with 1 and 0

1.	_____ × 1 = 2	
2.	_____ × 1 = 3	
3.	_____ × 1 = 4	
4.	_____ × 1 = 9	
5.	8 × _____ = 0	
6.	9 × _____ = 0	
7.	4 × _____ = 0	
8.	5 × _____ = 5	
9.	6 × _____ = 6	
10.	7 × _____ = 7	
11.	3 × _____ = 3	
12.	0 ÷ 1 = _____	
13.	0 ÷ 2 = _____	
14.	0 ÷ 3 = _____	
15.	0 ÷ 6 = _____	
16.	1 × _____ = 1	
17.	4 ÷ _____ = 4	
18.	5 ÷ _____ = 5	
19.	6 ÷ _____ = 6	
20.	8 ÷ _____ = 8	
21.	_____ × 1 = 5	
22.	3 × _____ = 0	

23.	9 ÷ _____ = 9	
24.	8 × _____ = 8	
25.	_____ × 1 = 1	
26.	0 ÷ 3 = _____	
27.	_____ × 1 = 7	
28.	6 × _____ = 0	
29.	4 × _____ = 4	
30.	0 ÷ 8 = _____	
31.	0 × _____ = 0	
32.	1 ÷ 1 = _____	
33.	_____ × 1 = 24	
34.	17 × _____ = 0	
35.	32 × _____ = 32	
36.	0 ÷ 19 = _____	
37.	46 × _____ = 0	
38.	0 ÷ 51 = _____	
39.	64 × _____ = 64	
40.	_____ × 1 = 79	
41.	0 ÷ 82 = _____	
42.	_____ × 1 = 96	
43.	27 × _____ = 27	
44.	43 × _____ = 0	

B

Multiply and Divide with 1 and 0

1.	_____ × 1 = 3	
2.	_____ × 1 = 4	
3.	_____ × 1 = 5	
4.	_____ × 1 = 8	
5.	7 × _____ = 0	
6.	8 × _____ = 0	
7.	3 × _____ = 0	
8.	4 × _____ = 4	
9.	5 × _____ = 5	
10.	6 × _____ = 6	
11.	2 × _____ = 2	
12.	0 ÷ 2 = _____	
13.	0 ÷ 3 = _____	
14.	0 ÷ 4 = _____	
15.	0 ÷ 7 = _____	
16.	1 × _____ = 1	
17.	3 ÷ _____ = 3	
18.	4 ÷ _____ = 4	
19.	5 ÷ _____ = 5	
20.	7 ÷ _____ = 7	
21.	_____ × 1 = 6	
22.	4 × _____ = 0	

23.	8 ÷ _____ = 8	
24.	7 × _____ = 7	
25.	_____ × 1 = 1	
26.	0 ÷ 5 = _____	
27.	_____ × 1 = 9	
28.	5 × _____ = 0	
29.	9 × _____ = 9	
30.	0 ÷ 6 = _____	
31.	1 ÷ 1 = _____	
32.	0 × _____ = 0	
33.	_____ × 1 = 34	
34.	16 × _____ = 0	
35.	31 × _____ = 31	
36.	0 ÷ 18 = _____	
37.	45 × _____ = 0	
38.	0 ÷ 52 = _____	
39.	63 × _____ = 63	
40.	_____ × 1 = 78	
41.	0 ÷ 81 = _____	
42.	_____ × 1 = 97	
43.	26 × _____ = 26	
44.	42 × _____ = 0	

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

18

A

Number Correct: _____

Multiply by Multiples of 10

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

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Lesson 21: Solve two-step word problems involving multiplying single-digit factors and multiples of 10.

B

Multiply by Multiples of 10

1.	$4 \times 2 =$	
2.	$4 \times 20 =$	
3.	$40 \times 2 =$	
4.	$3 \times 3 =$	
5.	$3 \times 30 =$	
6.	$30 \times 3 =$	
7.	$3 \times 2 =$	
8.	$3 \times 20 =$	
9.	$30 \times 2 =$	
10.	$5 \times 5 =$	
11.	$50 \times 5 =$	
12.	$5 \times 50 =$	
13.	$4 \times 3 =$	
14.	$40 \times 3 =$	
15.	$4 \times 30 =$	
16.	$7 \times 3 =$	
17.	$7 \times 30 =$	
18.	$70 \times 3 =$	
19.	$6 \times 4 =$	
20.	$60 \times 4 =$	
21.	$6 \times 40 =$	
22.	$9 \times 4 =$	

23.	$9 \times 40 =$	
24.	$90 \times 4 =$	
25.	$8 \times 6 =$	
26.	$80 \times 6 =$	
27.	$5 \times 2 =$	
28.	$5 \times 20 =$	
29.	$3 \times 80 =$	
30.	$40 \times 8 =$	
31.	$4 \times 50 =$	
32.	$8 \times 80 =$	
33.	$90 \times 6 =$	
34.	$6 \times 70 =$	
35.	$60 \times 6 =$	
36.	$7 \times 70 =$	
37.	$60 \times 5 =$	
38.	$6 \times 80 =$	
39.	$7 \times 80 =$	
40.	$80 \times 6 =$	
41.	$90 \times 7 =$	
42.	$8 \times 50 =$	
43.	$80 \times 9 =$	
44.	$7 \times 90 =$	

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Lesson 21: Solve two-step word problems involving multiplying single-digit factors and multiples of 10.

20

Exit Ticket Packet

Name _____ Date _____

1. Use the array to write two different multiplication facts.

_____ = _____ × _____

_____ = _____ × _____
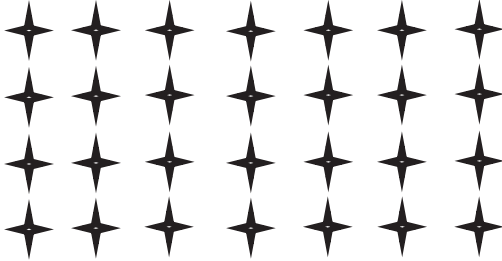
2. Karen says, "If I know 3 × 8 = 24, then I know the answer to 8 × 3." Explain why this is true.

Lesson 1: Study commutativity to find known facts of 6, 7, 8, and 9.

1

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Name _____   Date _____

Use a fives fact to help you solve 7 × 6. Show your work using pictures, numbers, or words.

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Name _____   Date _____

Find the value of the unknown in Problems 1–4.

1. $z = 5 \times 9$

   z = _____

2. $30 \div 6 = v$

   v = _____

3. $8 \times w = 24$

   w = _____

4. $y \div 4 = 7$

   y = _____

5. Mr. Strand waters his rose bushes for a total of 15 minutes. He waters each rose bush for 3 minutes.
    How many rose bushes does Mr. Strand water? Represent the problem using multiplication and division
    sentences and a letter for the unknown. Then, solve the problem.

    _____ × _____ = _____

    _____ ÷ _____ = _____

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Lesson 3:   Multiply and divide with familiar facts using a letter to represent
            the unknown.

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3

Name _____   Date _____

1. Sylvia solves 6 × 9 by adding 48 + 6. Show how Sylvia breaks apart and bonds her numbers to complete the ten. Then, solve.

2. Skip-count by six to solve the following:

    a.   8 × 6 = _____   b.   54 ÷ 6 = _____

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Lesson 4:   Count by units of 6 to multiply and divide using number bonds to decompose.

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4

Name _____   Date _____

Complete the count-by seven sequence below. Then, write a multiplication equation and a division equation to represent each number in the sequence.

7, 14, _____, 28, _____, 42, _____, _____, 63, _____

a. _____ × 7 = _____   _____ ÷ 7 = _____

b. _____ × 7 = _____   _____ ÷ 7 = _____

c. _____ × 7 = _____   _____ ÷ 7 = _____

d. _____ × 7 = _____   _____ ÷ 7 = _____

e. _____ × 7 = _____   _____ ÷ 7 = _____

f. _____ × 7 = _____   _____ ÷ 7 = _____

g. _____ × 7 = _____   _____ ÷ 7 = _____

h. _____ × 7 = _____   _____ ÷ 7 = _____

i. _____ × 7 = _____   _____ ÷ 7 = _____

j. _____ × 7 = _____   _____ ÷ 7 = _____

Name _____   Date _____

1. A parking lot has space for 48 cars. Six cars can park in 1 row. Break apart 48 to find how many rows there are in the parking lot.

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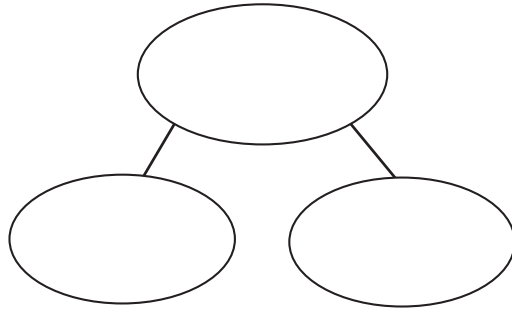
2. Malia solves 6 × 7 using (5 × 7) + 7. Leonidas solves 6 × 7 using (6 × 5) + (6 × 2). Who is correct? Draw a picture to help explain your answer.

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Name _____ Date _____

Model each problem with a drawing. Then, write an equation using a letter to represent the unknown, and solve for the unknown.

1. Three boys and three girls each buy 7 bookmarks. How many bookmarks do they buy all together?

2. Seven friends equally share the cost of a $56 meal. How much does each person pay?

Lesson 7:   Interpret the unknown in multiplication and division to model and solve problems using units of 6 and 7.

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7

Name _____   Date _____

1. Use parentheses to make the equations true.

   a. $24 = 32 - 14 + 6$

   b. $12 = 32 - 14 + 6$

   c. $2 + 8 \times 7 = 70$

   d. $2 + 8 \times 7 = 58$

2. Marcos solves $24 \div 6 + 2 =$ _____. He says it equals 6. Iris says it equals 3. Show how the position of parentheses in the equation can make both answers true.

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Lesson 8:   Understand the function of parentheses and apply to solving problems.

8

Name _____   Date _____

Simplify to find the answer to 18 × 3. Show your work, and explain your strategy.

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Lesson 9:   Model the associative property as a strategy to multiply.

9

Name _____   Date _____

Use the break apart and distribute strategy to solve the following problem. You may choose whether or not to draw an array.

   7 × 8 =_____

Name _____   Date _____

Erica buys some packs of rubber bracelets. There are 8 bracelets in each pack.

a. How many packs of rubber bracelets does she buy if she has a total of 56 bracelets? Draw a tape diagram, and label the total number of packages as *p*. Write an equation, and solve for *p*.

b. After giving some bracelets away, Erica has 18 left. How many bracelets did she give away?

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Lesson 11:   Interpret the unknown in multiplication and division to model and   **11**
                    solve problems.

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Name _____   Date _____

1. Each ⬜ has a value of **9**. Complete the equations to find the total value of the tower of blocks.

    _____ **× 9** = (5 + _____) × 9

    = (5 × _____) + (_____ × _____)

    = 45 + _____

    = _____
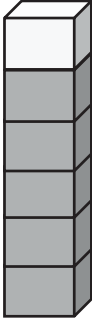
2. Hector solves 9 × 8 by subtracting 1 eight from 10 eights. Draw a model, and explain Hector's strategy.

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Lesson 12:   Apply the distributive property and the fact 9 = 10 − 1 as a strategy
to multiply.

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12

Name _____   Date _____

1. 6 × 9 = 54   8 × 9 = 72

    What is 10 more than 54? _____   What is 10 more than 72? _____

    What is 1 less? _____   What is 1 less? _____

    7 × 9 = _____   9 × 9 = _____

2. Explain the pattern used in Problem 1.

Name _____   Date _____

Donald writes 6 × 9 = 54. Explain two strategies you could use to check his work.

Name _____   Date _____

Use a letter to represent the unknown.

1. Mrs. Aquino pours 36 liters of water equally into 9 containers. How much water is in each container?

2. Marlon buys 9 packs of hot dogs. There are 6 hot dogs in each pack. After the barbeque, 35 hot dogs are left over. How many hot dogs were eaten?

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Lesson 15:   Interpret the unknown in multiplication and division to model and solve problems.

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15

Name _____   Date _____

1. Complete.

    a. _____ × 1 = 5   b. 6 × _____ = 6   c. _____ ÷ 7 = 0

    d. 5 × _____ = 0   e. 1 = 9 ÷ _____   f. 8 = 1 × _____

2. Luis divides 8 by 0 and says it equals 0. Is he correct? Explain why or why not.

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

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Name _____   Date _____

1. Use what you know to find the product of 8 × 12 or 6 eights + 6 eights.

2. Luis says 3 × 233 = 626. Use what you learned about odd times odd to explain why Luis is wrong.

Lesson 17:   Identify patterns in multiplication and division facts using the
                   multiplication table.

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17

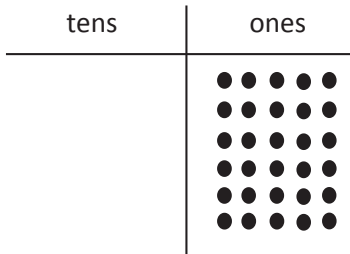Name _____   Date _____

Use the RDW process to solve. Explain why your answer is reasonable.

On Saturday, Warren swims laps in the pool for 45 minutes. On Sunday, he runs 8 miles. It takes him 9 minutes to run each mile. How long does Warren spend exercising over the weekend?
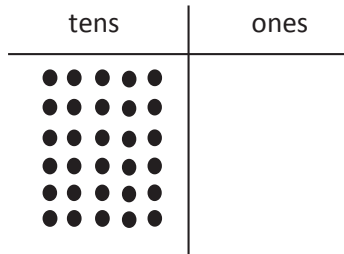
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Lesson 18:   Solve two-step word problems involving all four operations and assess the reasonableness of solutions.

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18

Name _____   Date _____

1. Use the chart to complete the blanks in the equations.

tens	ones

6 × 5 ones = _____ ones

6 × 5 = _____

tens	ones

6 × 5 tens = _____ tens

6 × 50 = _____

_____

2. A small plane has 20 rows of seats. Each row has 4 seats.

    a. Find the total number of seats on the plane.
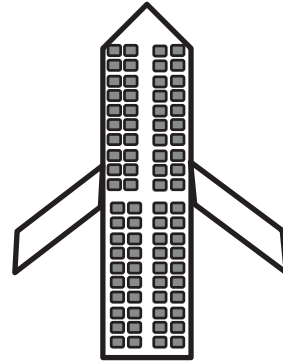
    b. How many seats are on 3 small planes?

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Lesson 19:   Multiply by multiples of 10 using the place value chart.

19

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Name _____   Date _____

1. Place parentheses in the equations to find the related fact. Then, solve.

   a.   4 × 20 = 4 × 2 × 10   b.   3 × 30 = 3 × 3 × 10

        = 4 × 2 × 10   = 3 × 3 × 10

        = _____ × 10   = _____ × 10

        = _____   = _____

2. Jamila solves 20 × 5 by thinking about 10 tens. Explain her strategy.

Name _____   Date _____

Use the RDW process to solve. Use a letter to represent the unknown.

Frederick buys a can of 3 tennis balls. The empty can weighs 20 grams, and each tennis ball weighs 60 grams. What is the total weight of the can with 3 tennis balls?

Lesson 21:   Solve two-step word problems involving multiplying single-digit factors and multiples of 10.

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21

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Assessment Packet

Name _____   Date _____

1. The carnival is in town for 21 days. How many weeks is the carnival in town? (There are 7 days in 1 week.) Write an equation, and solve.

2. There are 48 liters of water needed to finish filling the dunk tank at the carnival. Each container holds 8 liters of water. How many containers are needed to finish filling the dunk tank? Represent the problem using multiplication and division sentences and a letter for the unknown. Solve.

    _____ × _____ = _____

    _____ ÷ _____ = _____

3. There are 4 rows of 7 chairs setup for the Magic Show. A worker sees the large number of people lined up and doubles the number of rows of chairs. They are shown below.

   Explain and label to show how the array represents both 8 × 7 and 2 × (4 × 7).
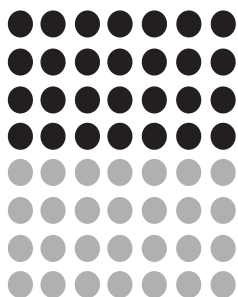
4. a. Fabrizio wins a bumblebee doll with 6 stripes. He notices that 5 other children in line for the Magic Show won the same doll. How many stripes are on 6 bumblebee dolls? Write an equation using a letter to represent the unknown. Solve.

The magician uses a magic box. Every time he puts an object in, it gets multiplied. Fabrizio writes down what happens each time and tries to find a pattern. Look at his notes to the right.

b. Use the pattern to fill in the number of bean bags.

c. What does the magic box do? Explain how you know.

In	Out
2 Feathers	14 Feathers
3 Marbles	21 Marbles
4 Dice	28 Dice
5 Wands	35 Wands
6 Bean bags	___ Bean bags

d. The magician puts 12 rings into the magic box. Fabrizio draws a number bond to find the total number of rings after they are multiplied in the magic box. Use the number bond to show how Fabrizio might have solved the problem.
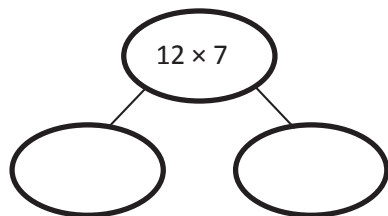
e. After the show, Fabrizio and 5 friends equally share the cost of a $54 magic set. They use the equation $6 \times n = \$54$ to figure out how much each person pays. How much does Fabrizio pay?

Name _____   Date _____

1. Aunt Korina and her 3 friends decide to share a cab to go to the mall. If they each spent $6, how much did the cab ride cost altogether? Write an equation using a letter to represent the unknown. Solve.

2. Aunt Korina's 3 friends each order pasta and a lemonade for lunch. Aunt Korina orders only chicken salad.

   a. Use the menu to find how much they spend altogether. Write equations using letters to represent the unknown. Solve.

Lunch Menu	
Pasta	$7
Chicken Salad	$9
Lemonade	$2

   b. Aunt Korina mentally checks the total using 4 × $9. Explain her strategy.

3. After lunch, the friends notice a sale. Compare the crossed out prices to the new sale prices. If all sale prices are calculated in the same way, what would the sale price be on an item that originally cost $24? Use words and equations to explain how you know.

~~$12~~   ~~$21~~   ~~$27~~   ~~$3~~   ~~$24~~

$4 $7 $9 $1 $?

4. a. A shopkeeper in the bookstore arranges the boxed sets of books as shown to the right.

   If each box contains 9 books, how many books are there?

   ▪ Write an equation using a letter to represent the unknown, and then solve.
   ▪ Explain how you know your answer is reasonable.
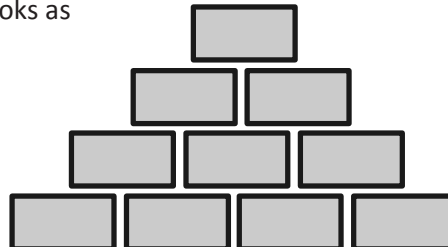
b.   Aunt Korina figures out how many books are in the arrangement. Her work is shown below.
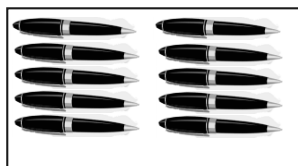   Explain Aunt Korina's strategy.

$$10 \times 10 - 10 = 90$$

c.   In the book store, Aunt Korina buys 3 boxes of pens. Each box contains 2 bundles of 10 gray pens.
     Her friend buys 6 packs of pens. Each pack contains 10 black pens. Explain how the equation below
     shows how Aunt Korina and her friend buy the same number of pens.

$$6 \times 10 = 3 \times 2 \times 10$$
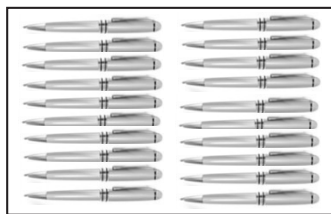
         Box of Gray Pens   Pack of Black Pens

5. Complete as many problems as you can in 100 seconds. The teacher will time you and tell you when to stop.

2 x 1 = _____	4 ÷ 2 = _____	_____ = 10 ÷ 5	3 x 3 = _____	2 x _____ = 4
_____ x 6 = 12	21 ÷ 7 = _____	8 x _____ = 24	_____ = 9 x 3	_____ = 30 ÷ 10
5 x 3 = _____	8 ÷ 2 = _____	_____ x 3 = 12	_____ = 16 ÷ 4	6 x 4 = _____
9 x 4 = _____	7 x _____ = 35	40 ÷ 8 = _____	_____ = 3 x 5	_____ x 4 = 20
7 x _____ = 35	_____ = 54 ÷ 9	_____ x 6 = 36	8 x 6 = _____	24 ÷ 4 = _____
9 x 6 = _____	_____ = 49 ÷ 7	8 x _____ = 56	_____ = 6 x 7	21 ÷ 3 = _____
7 x 7 = _____	_____ x 9 = 63	_____ = 64 ÷ 8	6 x _____ = 48	_____ = 4 x 8
24 ÷ 3 = _____	81 ÷ 9 = _____	63 ÷ 7 = _____	8 x 9 = _____	9 x _____ = 81