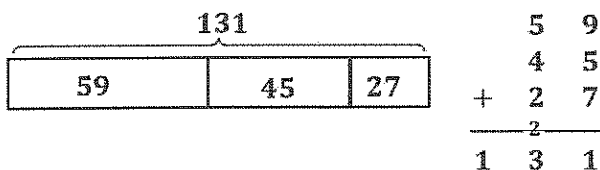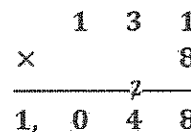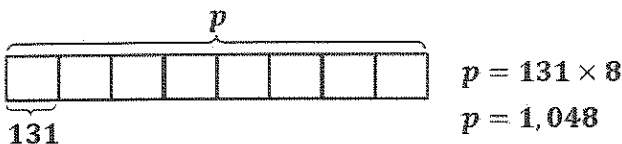## G4-M3-Lesson 12

Use the RDW process to solve the following problem.

1. The table shows the cost of bake sale goods. Milan's mom buys 1 brownie, 1 cookie, and 1 slice of cake for each of her 8 children. How much does she spend?

Baked Good	Cost
brownie	59¢
slice of cake	45¢
cookie	27¢

```
        131
┌──────────────────────┐
│  59  │   45   │  27  │
└──────────────────────┘
```

```
    5   9
    4   5
+   2   7
   ─────────
    1   3   1
```

I add and then multiply to solve.

```
      p
┌──┬──┬──┬──┬──┬──┬──┬──┐
│  │  │  │  │  │  │  │  │
└──┴──┴──┴──┴──┴──┴──┴──┘
 ─┬─
 131
```

$p = 131 \times 8$

$p = 1,048$

```
      1   3   1
×             8
   ──────────────
   1,  0   4   8
```

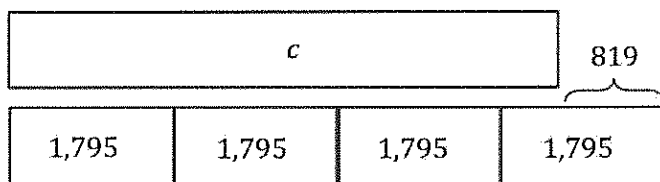*Milan's mom spends 1,048¢.*

2.

a. Write an equation that could be used to find the value of *c* in the tape diagram.

```
┌────────────────────────────────┬──────┐
│              c                  │ 819  │
└────────────────────────────────┴──────┘
┌────────┬────────┬────────┬────────┐
│ 1,795  │ 1,795  │ 1,795  │ 1,795  │
└────────┴────────┴────────┴────────┘
```
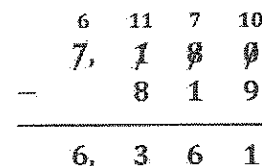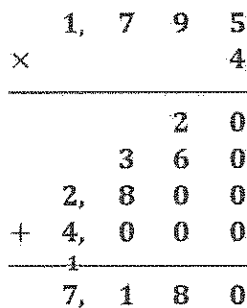
I thought of two other equations:

$c + 819 = 4 \times 1,795$

or

$c = (3 \times 1,795) + (1,795 - 819)$.

$c = 4 \times 1,795 - 819$

b. Write your own word problem to correspond to the tape diagram, and then solve.

Every month, Katrina earns $1,795. Kelly earns 4 times as much as Katrina earns. Mary earns $819 less than Kelly. How much does Mary earn each month?

$M = (4 \times 1,795) - 819$

$M = 7,180 - 819$

$M = 6,361$

```
          1,  7   9   5
      ×               4
      ──────────────────
              2   0
          3   6   0
      2,  8   0   0
  +   4,  0   0   0
      ──────────────────
      7,  1   8   0
```

```
      6   11   7   10
   7,  1   8    0
   −      8   1    9
   ──────────────────
   6,  3   6    1
```

I use the partial products method to make sure I record the products of each unit.

Mary earns $6,361 each month.