G4-M3-Lesson 30

Divide. Check your solutions by multiplying.

1. $705 \div 2$

```
      3  5  2   R1
   2 | 7  0  5
     - 6
       1  0
     - 1  0
          0  5
        -    4
             1
```
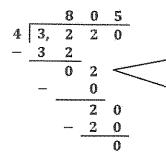
I decompose 1 hundred as 10 tens. There are no other tens to distribute. So I keep dividing, this time in the tens.

Once I divide the 10 tens, there are no tens remaining. But I must keep dividing. There are still 5 ones to divide.

```
        3  5  2
   ×           2
        7  0  4
```

```
        7  0  4
   +          1
        7  0  5
```

2. $6,250 \div 5$

```
      1  2  5  0
   5 | 6, 2  5  0
     - 5
       1  2
     - 1  0
          2  5
        - 2  5
             0  0
           -    0
                0
```

This time when I divide, there are no ones to distribute. 0 ones divided by 5 is 0 ones. I place a 0 in the ones place of the quotient to show that there are no ones.

```
     1, 2  5  0
   ×          5
     6, 2  5  0
```

3. $3,220 \div 4$

```
        8  0  5
   4 | 3, 2  2  0
     - 3  2
          0  2
        -    0
             2  0
           - 2  0
                0
```

2 tens can't be evenly divided by 4, so I record 0 tens in the quotient. But I must continue the steps of the algorithm: 0 tens times 4 equals 0 tens. 2 tens minus 0 tens is 2 tens.

```
        8  0  5
   ×          4
     3, 2  2  0
```

Lesson 30: Solve division problems with a zero in the dividend or with a zero in the quotient.

EUREKA MATH