Long Division With Partial Quotients #3
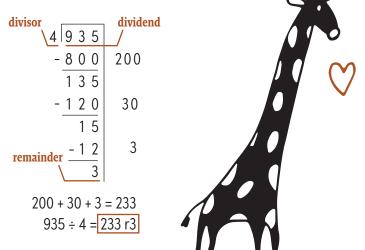
How to Divide With Partial Quotients

Step 1: Work with multiples of 100 and ask yourself: *How many times can 4 go into 935?* 4 can go into this dividend 200 times without going over.

Step 2: Subtract 800 from 935. How many times can 4 go into 135? Think multiples of 10! 4 multiplied by 30 is 120.

Step 3: Repeat until you can't subtract.

Step 4: Find the sum of the partial quotients. Then, write the remainder next to this sum!

```
divisor  4 9 3 5  dividend
          - 8 0 0    200
            1 3 5
          - 1 2 0     30
              1 5
remainder   - 1 2      3
                3
```

$$200 + 30 + 3 = 233$$
$$935 \div 4 = \boxed{233\ r3}$$

Directions: Find each quotient using the Partial Quotient Strategy and show all of your work.

1. $\boxed{122}$ r4

```
5 6 1 4
- 5 0 0   100
  1 1 4
- 1 0 0    20
    1 4
  - 1 0     2
      4
```

$$100 + 20 + 2 = 122$$

2. $\boxed{272}$ r2

```
3 8 1 8
```

3. $\boxed{331}$ r2

```
6 1,9 8 8
```

Let's Check Using the Inverse Operation!

Use multiplication to check your answer for problem number 1. Show all of your work.

Students' responses will vary. This shows that there are 5 groups of 122 with 4 leftover.

```
  1 1
  1 2 2
×     5
  6 1 0
```

$$610 + 4 = 614$$