Name ______________________ Date ___________________________

Long Division of Large Numbers - Guided Lesson Explanation

Explanation#1

a) Step 1) First we have to see what we have to calculate

"54588 divided by 12"

Step 2) Look at the first two digits. The first two digits are greater than 12. Start with the first two digits. Divide the thousands.

```
     4
12) 54588
    48
     6
```

12 X 4 = 48

54-48 = 6

Bring down the hundreds. Divide the hundreds.

```
     45
12) 54588
    48↓
     65
     60
      5
```

12 X 5 = 60

65- 60 = 5

Bring down the tens. Divide the tens.

```
     454
12) 54588
    48
     65
     60↓
      58
      48
      10
```

12 X 4 = 48

58 – 48 = 10

Name _____ Date _____

Now divide again.

```
    4549
12) 54588
    48
    65
    60
    58
    48
    108
    108
     X
```

12 X 9 = 108

108 – 108 = 0

Step 3) The answer is 4549.

b) Step 1) First we have to see what we have to calculate

"1694 ÷ 14"

Step 2) Look at the first two digits. The first two digits are more than 14. Start with the first two digits. Divide the thousands.

```
    1
14) 1694
    14
    2
```

14 X 1 = 14

16-14. = 2

Bring down the tens. Divide the tens

```
    12
14) 1694
    14
    29
    28
    1
```

14 X 2 = 28

29- 28 = 1

Name ______________________ Date __________________________

Bring down the ones. Divide the ones.

```
     121
    _____
14) 1694        14 X 1 = 14
     |
    14↓         14- 14 = 0
    ___
     29
     28
    ___
      14
      14
     ___
       X
```

Explanation#2

Step 1) Identify what is being asked of you.

"How many cakes did Wilson purchase?"

Step2) We are looking for how units of $200 can be divided in the total cost of the crate. Now divide $8,000 by $200.

8000 / 200 = 40

Step 3) So, there are 40 cakes in the crate.

Explanation#3

Step 1) First we have to see what we have to calculate

"Is 44,604 divisible by 18"

Step 2) Look at the first two digits. The first two digits are more than 18. Start with the first 2 digits. Divide the ones.

```
     2
    ______
18) 44604       18 X 2 = 36

    36          44- 36 = 8
    ___
     8
```

Name _____ Date _____

Bring down the hundreds. Divide the hundreds.

```
   24
18)44604
   36
   86
   72
   14
```

18 X 4 = 72

86 - 72 = 14

Bring down the tens. Divide the tens.

```
   247
18)44604
   36
   86
   72
  140
  126
   14
```

18 X 7 = 126

140 - 126 = 14

Bring down the ones. Divide the ones.

```
   2478
18)44604
   36
   86
   72
  140
  126
  144
  144
    X
```

18 X 8 = 144

144 - 144 = 0