Math 6 - Unit 1: Number System Fluency

Long Division with Remainders

Name: _____

Class Period: 1 2 3 4 Date: _____

Solve the following division problems (write your remainders as fractions or decimals):

1) 891 ÷ 6

$148\ \frac{1}{2}$ *or* 148.5

2) 390 ÷ 21

$18\frac{12}{21} = 18\frac{4}{7}$ *or*

18.57 *rounded to the nearest* 100*th*

3) 975 ÷ 8

$121\ \frac{7}{8}$ *or* 121.875

4) 324 ÷ 9

36

5) 628 ÷ 27

$23\frac{7}{27}$ *or* 23.26 *rounded*

to the nearest 100*th*

6) 390 ÷ 39

10

Riding the Roller Coaster: At an amusement park, the roller coaster seats **25** passengers per train.

4) If 1,172 people are waiting in line, how many trains will it take for all of the people in line to ride the roller coaster?

Solution: 47 Trains

Is there a remainder when you divided?: yes

Explain how that remainder was important to solving the problem: The remainder meant that the ride would have to run one more train that wasn't full to get the last few people on the ride.

5) If 600 people are waiting in line, how many trains will it take for all of the people in line to ride the roller coaster?

Solution: 24 Trains Is there a remainder?: No

Explain what the remainder or lack of remainder means in terms of the problem: The fact that there is no remainder means that every train that went out was filled with 25 passengers. No train went out only partially full.