Math 6 - Unit 1: Number System Fluency
(GCF & LCM/Word Problems/Long Division)

Name: _____

Class Period: 1 2 3 4 Date: _____

1) Find the GCF of 54 and 81.

Answer: _____

2) Find the LCM of 5 and 12.

Answer: _____

What do you need to find to be able to answer the following problems? Circle GCF or LCM.

3) There are 35 girls in band and 42 boys in band. The band teacher plans to arrange the students in equal rows. Only girls or boys will be in each row. What is the greatest number of students that could be in each row?

LCM **GCF**

4) Thomas has piano lessons every 5 days and swim practice every 3 days. If he had a piano lesson and a swim practice today, in how many days will he have both piano lessons and swim practice?

LCM **GCF**

5) Boxes that are 6 inches tall are being stacked next to boxes that are 10 inches tall. What is the **shortest height** at which the two stacks will be the **same height**?

Answer: _____

6) Samantha has 40 Jolly Ranchers and 25 Hershey's Kisses and she wants to put them into bags for her friends. She wants each friend to get the same amount of Jolly Ranchers and the same amount of Hershey's Kisses. **a)** If she wants each bag to have the **greatest number of candies possible**, how many bags will she need? **b)** How many Jolly Ranchers will be in each bag? **c)** How many Hershey's Kisses will be in each bag?

Answers: **a)**_____ **b)**_____ **c)**_____

7) The Batman ride at Six Flags sends out a train every 4 minutes. The Ninja sends out a train every 7 minutes. How many minutes after the first trains leave the station will both coasters send their trains out at the same time?

Answer: _____

8) $76 \div 4 =$

9) $180 \div 15 =$

10) $22 \div 726 =$

BONUS: (Try if you want for extra credit!)

Two alarms go off at the same time. Alarm A goes off every 4 minutes and alarm B goes off every 10 minutes. In 2 hours, how many times will they go off at the same time?

Math 6 - Unit 1: Number System Fluency
(GCF & LCM/Word Problems/Long Division)

Name: Key

Class Period: 1 2 3 4 Date: _____

1) Find the GCF of 54 and 81.

9 | 54 81 9×3=27
3 | 6 9
2 3

Answer: 27

2) Find the LCM of 5 and 12.

1 | 5 12 1×5×12=60
5 12

Answer: 60

What do you need to find to be able to answer the following problems? Circle GCF or LCM.

3) There are 35 girls in band and 42 boys in band. The band teacher plans to arrange the students in equal rows. Only girls or boys will be in each row. What is the greatest number of students that could be in each row?

LCM (GCF)

4) Thomas has piano lessons every 5 days and swim practice every 3 days. If he had a piano lesson and a swim practice today, in how many days will he have both piano lessons and swim practice?

(LCM) GCF

5) Boxes that are 6 inches tall are being stacked next to boxes that are 10 inches tall. What is the **shortest height** at which the two stacks will be the **same height**?

2 | 6 10 2×3×5=30
3 5

Answer: 30

6) Samantha has 40 Jolly Ranchers and 25 Hershey's Kisses and she wants to put them into bags for her friends. She wants each friend to get the same amount of Jolly Ranchers and the same amount of Hershey's Kisses. **a)** If she wants each bag to have the **greatest number of candies possible**, how many bags will she need? **b)** How many Jolly Ranchers will be in each bag? **c)** How many Hershey's Kisses will be in each bag?

5 | 40 25
8 5

Answers: **a)** 5 **b)** 8 **c)** 5

7) The Batman ride at Six Flags sends out a train every 4 minutes. The Ninja sends out a train every 7 minutes. How many minutes after the first trains leave the station will both coasters send their trains out at the same time?

Six Flags - 4, 8, 12, 16, 20, 24, (28)

Ninja - 7, 14, 21, (28)

Answer: 28

8) 76 ÷ 4 =

$$4\overline{)76}\quad 19,\ -4,\ 36,\ -36,\ 0$$

9) 180 ÷ 15 =

$$15\overline{)180}\quad 12,\ -15,\ 30,\ -30,\ 0$$

10) 22 ÷ 726 =

$$22\overline{)726}\quad 33,\ -66,\ 66,\ -66,\ 0$$

BONUS: (Try if you want for extra credit!)

Two alarms go off at the same time. Alarm A goes off every 4 minutes and alarm B goes off every 10 minutes. In 2 hours, how many times will they go off at the same time?