

# Unit 1A Study Guide: GCF, LCM, Long Division and Decimal Operations

Name: Key

Period: \_\_\_\_\_

Due Date: \_\_\_\_\_

## Greatest Common Factor and Least Common Multiple (GCF & LCM)

## Standard-6.NS.4

1. Find the GCF of 12 and 32

$$\begin{array}{r} 2 \overline{) 12} \quad 32 \\ \underline{26} \quad 16 \\ 3 \quad 8 \end{array}$$

GCF = 4

2. Find the LCM of 12 and 16

$$\begin{array}{r} 4 \overline{) 12} \quad 16 \\ \underline{3} \quad 4 \end{array}$$

LCM =  $4 \times 3 \times 4 = 48$

3. Find the GCF of 24 and 28

$$\begin{array}{r} 4 \overline{) 24} \quad 28 \\ \underline{6} \quad 7 \end{array}$$

GCF = 4

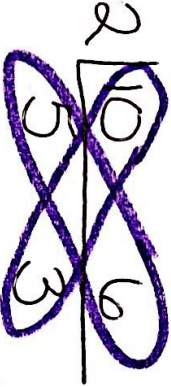
4. Find the LCM of 14 and 42

$$\begin{array}{r} 7 \overline{) 14} \quad 42 \\ \underline{2} \quad 6 \\ 2 \quad 3 \end{array}$$

LCM = 42

$$\begin{array}{r} 14 \\ \times 3 \\ \hline 42 \end{array}$$

5. Pencils come in packs of 10. Erasers come in packs of 6. How many packs of each should Joanna buy so that she has an equal number of each with none leftover?



30 of each

Pencils -  
3 packs  
Erasers -  
5 packs

6. Logan is making treat bags to sell at his school fundraiser. Logan wants each bag of cupcakes and cookies to be identical. If he has 24 cupcakes and 16 cookies, what is the greatest number of treat bags he can make?

$$\begin{array}{r} 4 \overline{) 24} \quad 16 \\ \underline{2} \quad 4 \\ 3 \quad 2 \end{array}$$

GCF = 4  
treat bags

## Long Division (with Remainders)

## Standard-6.NS.2

7. A popular macaroni and cheese company estimates that their factory produces 9,396 ounces of macaroni each day. If each box contains 12 ounces, how many boxes of macaroni does this company produce in a day?

$$\begin{array}{r} 783 \\ 12 \overline{) 9396} \\ \underline{84} \quad 99 \\ \underline{88} \quad 116 \\ \underline{120} \quad 96 \\ \underline{120} \quad 0 \end{array}$$

783 boxes

8. Heather has spent \$8,550 in rent since she has been living in her apartment. Heather has been living in this apartment for a year and a half. What is Heather's monthly rent payment?

$$\begin{array}{r} 475 \\ 18 \overline{) 8550} \\ \underline{72} \quad 135 \\ \underline{126} \quad 90 \\ \underline{90} \quad 0 \end{array}$$

\$475 per month

9. Tracy needs to feed her two dogs. The bag of dog food contains 4205 ounces of dog food. Each dog eats 15 ounces of food each day. If the dogs eat the same amount of food each day, how many days will the bag of dog food last?

$$\begin{array}{r} 140 \\ 30 \overline{) 4205} \\ \underline{30} \quad 120 \\ \underline{120} \quad 5 \\ 0 \end{array}$$

140 days

Decimal Operations (Addition, Subtraction, Multiplication, Division)

Standard 6.NS.3

10. Lauren buys six bags of cookies from the store. Each bag costs \$4.28. How much money will Lauren spend on cookies?

$$\begin{array}{r} 1 \phantom{0} \phantom{0} \phantom{0} \\ 4 \phantom{0} \phantom{0} \phantom{0} \\ \times 4.28 \\ \hline 25.68 \end{array}$$

\$25.68

11. Bruce bought a movie ticket for \$7.50, a popcorn for \$3.95, and a drink for \$2.25. How much money did Bruce spend in all?

$$\begin{array}{r} 1 \phantom{0} \phantom{0} \phantom{0} \\ 7.50 \\ + 3.95 \\ + 2.25 \\ \hline 13.70 \end{array}$$

\$13.70

12. It rained 0.75 inch on Thursday, 1.4 inches on Friday, and 0.5 inch on Saturday. How much more did it rain on Friday than on Thursday and Saturday combined?

$$\begin{array}{r} 1 \phantom{0} \phantom{0} \phantom{0} \\ 0.75 \\ + 0.50 \\ \hline 1.25 \end{array} \quad \begin{array}{r} 3 \phantom{0} \phantom{0} \phantom{0} \\ 1.40 \\ - 1.25 \\ \hline 0.15 \end{array}$$

0.15 inches

13. John paid \$21.76 for 6.8 gallons of gasoline that he put in the tank of his car. What was the price per gallon?

$$\begin{array}{r} 3.2 \\ 6.8 \overline{) 21.76} \\ \underline{-20.4} \phantom{0} \\ 136 \\ \underline{-136} \\ 0 \end{array}$$

\$3.20 per gallon

14. Melissa worked 37.228 hours this week. She worked 29.5 hours last week. How many more hours did Melissa work this week than last week?

$$\begin{array}{r} 216 \phantom{0} \phantom{0} \phantom{0} \\ 37.228 \\ - 29.500 \\ \hline 7.728 \end{array}$$

7.728 hours

15. An overseas phone call costs \$46.62 for 21 minutes. How much does the call cost per minute?

$$\begin{array}{r} 2 \phantom{0} \phantom{0} \phantom{0} \\ 21 \overline{) 46.62} \\ \underline{-42} \phantom{0} \phantom{0} \\ 46 \\ \underline{-42} \phantom{0} \\ 42 \\ \underline{-42} \\ 0 \end{array}$$

\$2.22 per minute

16. Ten members of the Science Club went to a history museum. It cost \$7.25 for each member of the club. If 90 members went to the museum, how much would the total cost be?

$$\begin{array}{r} 2 \phantom{0} \phantom{0} \phantom{0} \\ 7.25 \\ \times 90 \\ \hline 652.50 \end{array}$$

\$652.50

17. Tyler walked 10.456 kilometers and ran 4.698 kilometers yesterday. How much farther did he walk than run?

$$\begin{array}{r} 0 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ 10.456 \\ - 4.698 \\ \hline 5.758 \end{array}$$

5.758 km