ALBERT

Name _____ Date _____

GCF and LCM Worksheet

Grade 6 · Common Core 6.NS.B.4

> Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor.

Practice

Builds the skill step by step.

1. Find the greatest common factor (GCF) of 12 and 18.

2. Find the least common multiple (LCM) of 4 and 6.

3. Find the GCF of 16 and 24.

4. Which number is a common factor of 20 and 30?

   A. 10

   B. 20

   C. 3

   D. 60

5. Find the LCM of 3 and 5.

6. Find the GCF of 9 and 27.

7. Find the LCM of 6 and 8.

8. Which shows 24 + 36 written with the GCF factored out?

   A. 6(4 + 6)

   B. 4(6 + 9)

   C. 12(2 + 3)

   D. 12(2 + 6)

9. Find the GCF of 14 and 21.

10. Find the LCM of 2 and 9.

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On Level

Grade-level practice.

1. Find the GCF of 48 and 72.

2. Find the LCM of 8 and 12.

3. Write 36 + 54 as a multiple of a sum of two whole numbers with no common factor.

4. Hot dogs come in packs of 10 and buns in packs of 8. What is the fewest of each you can buy to have the same number of hot dogs and buns?

   A. 80 of each

   B. 18 of each

   C. 20 of each

   D. 40 of each

5. Find the GCF of 45 and 60.

6. Find the LCM of 9 and 12.

7. A teacher has 32 pencils and 40 erasers. She wants identical kits with no supplies left over. What is the greatest number of kits she can make?

8. Write 28 + 70 as a multiple of a sum of two whole numbers with no common factor.

9. What is the LCM of 10 and 12?

   A. 120

   B. 60

   C. 2

   D. 22

10. Find the GCF of 56 and 84.

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Challenge

Multi-step and word problems that stretch it.

1. One light blinks every 6 seconds and another every 10 seconds. They blink together now. In how many seconds will they next blink together?

2. A florist has 36 roses and 60 tulips. She makes identical bouquets using all the flowers. What is the greatest number of bouquets, and how many roses and tulips go in each?

3. Find the GCF of 84 and 98, then write 84 + 98 as a multiple of a sum with no common factor.

4. A bus leaves every 12 minutes and a train every 9 minutes. Both leave at 8:00 a.m. How many minutes after 8:00 a.m. do they next leave at the same time?

5. Two numbers have a GCF of 4 and an LCM of 24. Which pair could they be?

   A. 4 and 12

   B. 6 and 8

   C. 12 and 16

   D. 8 and 12

6. Find the LCM of 4, 6 and 9.

7. Ana says the GCF of 18 and 24 is 3 because 3 divides both. What mistake did she make, and what is the GCF?

8. Cups come in packs of 12 and plates in packs of 15. A party needs at least 100 of each. What is the smallest number of each you can buy so the counts are equal and at least 100?

9. The GCF of 30 and a number n is 6, and n is between 10 and 15. What is n?

10. A rectangle is 24 inches by 40 inches. It is covered with identical squares, with no gaps or overlaps. What is the largest possible side length of a square?