

Grade 6 - Greatest Common Factor and Least Common Multiple - Worksheet

Common Core 6.NS.B.4 · maths-pdf.fr/en/

Name: _____ Class: _____ Date: ____/____/____

These 20 problems practice greatest common factor and least common multiple (Common Core 6.NS.B.4). You will list factors and multiples, use factor trees and prime factorization, rewrite sums with the distributive property, and solve word problems about schedules and equal groups.

Grade 6 · Common Core State Standards: **6.NS.B.4**

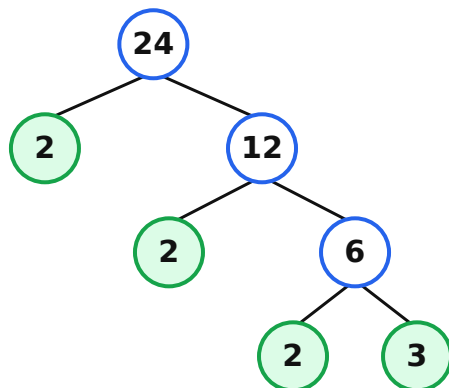
Exercise 1 - List the factors

List all the factors of 24.

Exercise 2 - GCF of 16 and 40

Find the greatest common factor of 16 and 40.

Exercise 3 - GCF of 24 and 36



Prime factors of 24.

Find the greatest common factor of 24 and 36.

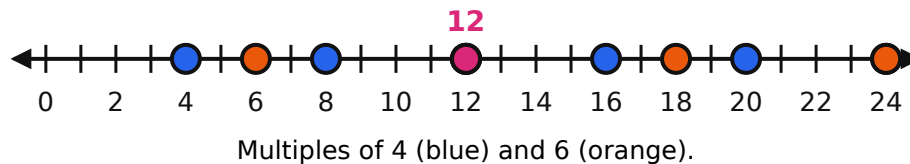
Exercise 4 - GCF of 45 and 60

Find the greatest common factor of 45 and 60.

Exercise 5 - GCF of 28 and 70

Find the greatest common factor of 28 and 70.

Exercise 6 - LCM of 4 and 6



Find the least common multiple of 4 and 6.

Exercise 7 - LCM of 10 and 15

Find the least common multiple of 10 and 15.

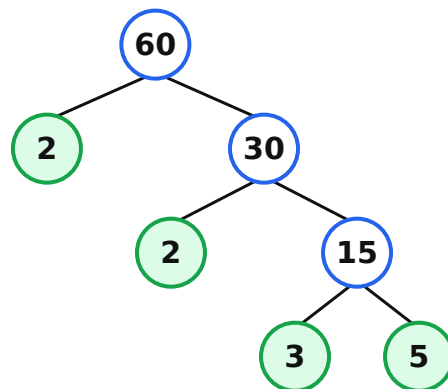
Exercise 8 - LCM of 14 and 21

Find the least common multiple of 14 and 21.

Exercise 9 - LCM of 5 and 7

Find the least common multiple of 5 and 7.

Exercise 10 - Prime factorization



A factor tree for 60.

Use the factor tree to write the prime factorization of 60 with exponents.

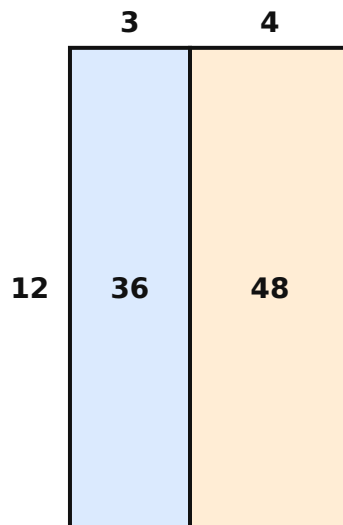
Exercise 11 - GCF with prime factors

Use prime factorizations to find the GCF of 84 and 126.

Exercise 12 - LCM with prime factors

Use prime factorizations to find the LCM of 18 and 30.

Exercise 13 - Distributive property



A rectangle with height 12 split into widths 3 and 4.

Use the greatest common factor to write $36+48$ as a product of the GCF and a sum.

Exercise 14 - Factor out the GCF

Write $42+28$ as a product of the GCF and a sum.

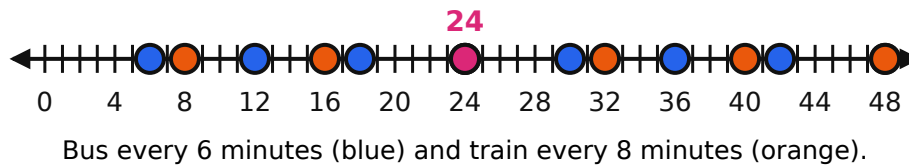
Exercise 15 - Rewrite a sum

Write $45+75$ as a product of the GCF and a sum.

Exercise 16 - Goodie bags

Maya has 24 stickers and 36 pencils. She makes identical goodie bags with no items left over. Find the greatest number of bags she can make and the number of each item in a bag.

Exercise 17 - Bus and train

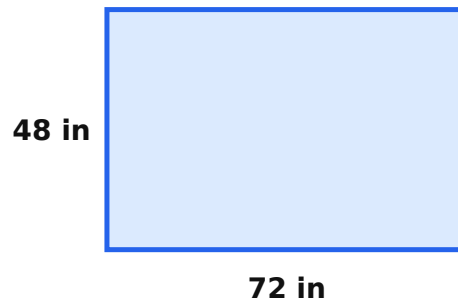


A bus leaves a station every 6 minutes and a train leaves every 8 minutes. Both leave at 8:00 a.m. Find when they next leave together.

Exercise 18 - Running schedule

Aisha runs every 4 days and Jamal runs every 6 days. They both run today. Find how many days until they run together again.

Exercise 19 - Square tiles



A floor 48 inches by 72 inches (scaled drawing).

A floor is 48 inches by 72 inches. Find the side length of the largest square tile that fits with no cutting, and the number of tiles needed.

Exercise 20 - Garden rows

A garden has 18 rose bushes and 30 tulip plants. They are planted in identical rows with no plants left over. Find the greatest number of rows, the number of each plant in a row, and write $18 + 30$ using the distributive property.