

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

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

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

This 45-minute test has 9 questions worth 20 points. It covers factors, GCF, LCM, prime factorization, the distributive property, and word problems (Common Core 6.NS.B.4). Show your work for full credit.

About this test

- Grade: Grade 6
- Chapter: Greatest Common Factor and Least Common Multiple
- Standards: 6.NS.B.4
- Time: 45 minutes
- Total: 20 points

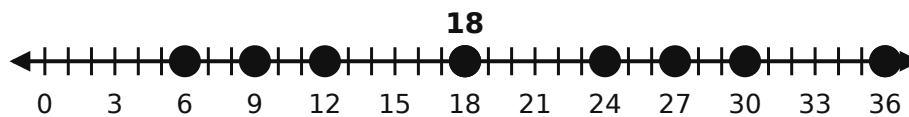
Question 1 - Factors [2 pts]

List all the factors of 40.

Question 2 - GCF [2 pts]

Find the greatest common factor of 36 and 54.

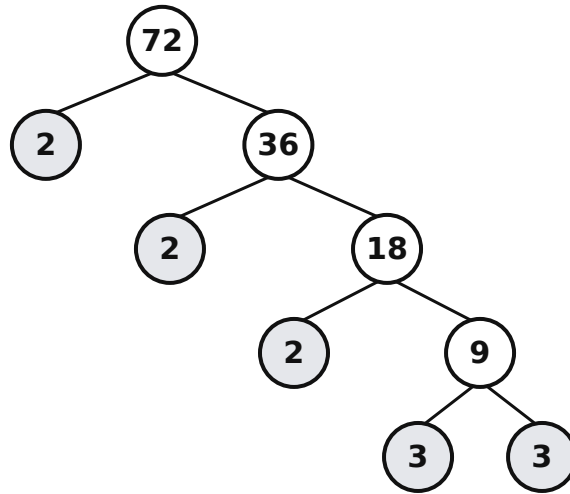
Question 3 - LCM [2 pts]



Multiples of 6 and 9.

Find the least common multiple of 6 and 9.

Question 4 - Prime factorization [2 pts]



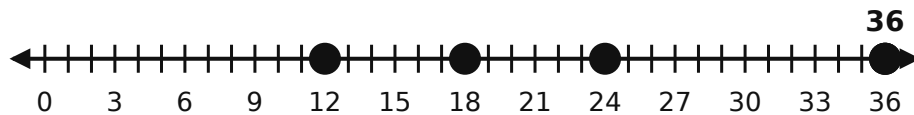
A factor tree for 72.

Write the prime factorization of 72 using exponents.

Question 5 - Distributive property [2 pts]

Write $54+81$ as a product of the GCF and a sum.

Question 6 - Schedules [2 pts]



Flashes every 12 seconds and every 18 seconds.

A lighthouse flashes every 12 seconds. A buoy light flashes every 18 seconds. They flash together at 0 seconds. When do they flash together next?

Question 7 - Sharing equally [2 pts]

Noah has 48 red beads and 60 blue beads. He makes identical bracelets using all the beads. Find the greatest number of bracelets.

Question 8 - Fruit trays [3 pts]

A school fair has 56 apples and 42 oranges. Volunteers make identical fruit trays using all the fruit. Find the greatest number of trays, the number of each fruit per tray, and write $56 + 42$ using the GCF.

Question 9 - Two schedules [3 pts]

Sofia practices piano every 3 days, soccer every 4 days, and art every 6 days. She does all three today. Find how many days until she does all three on the same day again.