

Lesson 6-7 • Group 2

Reinforce Understanding

6.7 Small Group • Group 2

I can find the greatest common factor and the least common multiple of two numbers, and use each to solve a real problem, explain why the method works, and use it on a problem I have not seen before.

Worked model

Find the greatest common factor of 16 and 24.

1. List the factors of 16. 1, 2, 4, 8, 16
2. List the factors of 24. 1, 2, 3, 4, 6, 8, 12, 24
3. Mark the factors that are in both lists. 1, 2, 4, 8
4. Pick the greatest shared factor. GCF = 8

Answer: The greatest common factor of 16 and 24 is 8.

Practice

Complete each exercise. Show the reasoning that supports your answer.

1. The store has 48 pencils and 36 notebooks. Complete the factor lists, then find the GCF.

Complete the table. Show how you found each value.

Number	Factors	GCF
48	1, 2, 3, 4, 6, 8, 12, 16, 24, 48	
36		

Show your work

2. Sort each real problem by the tool that solves it.

Write the name of the correct group on each line.

Groups: Use the GCF Use the LCM

- _____ Split 48 pencils and 36 notebooks into identical packs
- _____ Two classes repeat every 6 and 8 weeks — when do they meet?
- _____ Cut two ribbons into the longest equal pieces with none left over
- _____ Hot dogs in packs of 10, buns in packs of 8 — when do they match?
- _____ The answer is at most the smaller number
- _____ The answer is at least the larger number