Topic 3 L.3: Factoring Expressions

Warm-Up

1. Use the model to answer the following questions.

How many fives are in the model?

How many threes are in the model?

What expression could we write to represent the model?

1. Use the new model and the previous model to answer the next set of questions.

How many fives are in the model?

How many threes are in the model?

What expression could we write to represent the model?

1. Now, we will take a look at an example with variables. Discuss the questions with your partner.

What does mean?

How many ’s are in the model? How many ’s are in the model?

What expression could we write to represent the model?

1. How many ’s are in the expression? How many ’s are in the expression?

What expression could we write to represent the model?

Are the two expressions equivalent?

Guided Practice

1. What is the Greatest Common Factor (Divisor)?
2. What is the GCF of 18 and 9?

Use GCF and the distributive property to write equivalent expressions in **factored form**. Use the distributive property to check your answers.



What is the GCF?

How can we use the GCF to write this expression is factored form?



What is the GCF in Problem 2?

How can we use the GCF to write this expression is factored form?



Is there a GCF in Problem 3?

How can we use the GCF to write this expression is factored form?



Is there a GCF in Problem 3?

How can we use the GCF to write this expression is factored form?

Find the missing value that makes the two expressions equivalent.



Independent Practice

1. Write equivalent expressions by factoring. Use the distributive property to check your answers.

Lesson Summary

**An Expression in Factored Form:** An expressionthat is a product of two or more expressions is said to be in *factored form*.

Homework

1. Use models to prove that is equivalent to .
2. Use GCF to write equivalent expressions in factored form for the following expressions. Check your work using the distributive property.