Name_____ Date_____ Period_____

LESSON 6-8 · SESSION 2 · PREREQUISITE PRACTICE B · SKILL 1 OF 2

Find the Greatest Common Factor

Builds on Lesson 6-7 Session 1 · 6.NS.B.4

TODAY'S LESSON	You will factor $20t + 45$ by pulling out the GCF of 20 and 45.
YOU NEED TO	Find the GCF of two numbers, like 20 and 45: the GCF is 5. **You will use it in Practice Form A, problems 2 and 3.**

STEPS TO FOLLOW

use these same steps on every problem

1. List all the **factors** of the first number.
2. List all the **factors** of the second number.
3. Find the **greatest** number on both lists.

WATCH ME

the steps in action

Find the GCF of 24 and 30.

Step 1 24: 1, 2, 3, 4, 6, 8, 12, 24

Step 2 30: 1, 2, 3, 5, 6, 10, 15, 30

Step 3 Both lists: 1, 2, 3, 6. The greatest is 6.

Answer **6**

TRY IT WITH HELP

fill in each step

1. Find the GCF of 12 and 16.

Step 1 12: 1, 2, 3, _____, 6, 12

Step 2 16: 1, 2, _____, 8, 16

Step 3 Both lists: 1, 2, _____. The GCF is _____.

2. Find the GCF of 14 and 35.

Step 1 14: 1, 2, _____, 14

Step 2 35: 1, 5, _____, 35

Step 3 Both lists: 1, _____. The GCF is _____.

YOUR TURN

use the steps on your own

3. Find the GCF of the two numbers in each expression.

a. $8x + 12$ _____

b. $10y + 15$ _____

c. $6n + 9$ _____

d. $14a + 21$ _____

e. $20m + 30$ _____

f. $9k + 4$ _____

Distribute and Combine Like Terms

Builds on Lesson 6-8 Session 1 · 6.EE.A.3

TODAY'S LESSON	You will simplify expressions like $3(x + 10) + 2x$.
YOU NEED TO	Distribute first, then combine like terms, like $4(n + 3) + 2n = 6n + 12$. **You will use it in Practice Form A, problems 4 and 5.**

STEPS TO FOLLOW

use these same steps on every problem

1. **Distribute**: multiply the outside number by each term inside.
2. **Combine** the variable terms.
3. **Write** the variable term, then the number.

WATCH ME

the steps in action

Simplify $4(n + 3) + 2n$.

Step 1 $4n + 12 + 2n$

Step 2 $4n + 2n = 6n$

Step 3 $6n + 12$

Answer $6n + 12$

TRY IT WITH HELP

fill in each step

4. Simplify $2(x + 3) + 5x$.

Step 1 $2x +$ _____ $+ 5x$

Step 2 $2x + 5x =$ _____

Step 3 Write: _____

5. Simplify $6(k + 5) - 2k$.

Step 1 $6k +$ _____ $- 2k$

Step 2 $6k - 2k =$ _____

Step 3 Write: _____

YOUR TURN

use the steps on your own

6. Simplify. Distribute first.

a. $3(a + 4) + a =$ _____

b. $5(m + 1) + 2m =$ _____

c. $7(b + 2) + b =$ _____

d. $8(r + 1) - 3r =$ _____

e. $e + 4(e + 2) =$ _____

f. $2(d + 6) + 4d =$ _____

READY CHECK

a problem like the one in today's lesson

7. Simplify $2(z + 6) + 3z$.

A $5z + 12$ **B** $5z + 6$ **C** $2z + 15$ **D** $17z$

CHECK YOURSELF ☐ I can do this on my own ☐ I need a little help ☐ I have a question about #____