Name_____ Date_____ Period_____

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

Find Factors of a Number

Builds on Grade 4 · 4.OA.B.4

TODAY'S LESSON	You will factor $18x + 24$ with a number that divides both 18 and 24.
YOU NEED TO	Find the common factors of two numbers, like 12 and 20. **You will use it in Practice Form A, problems 2 and 7.**

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 numbers on **both** lists.

WATCH ME

the steps in action

Find the common factors of 12 and 20.

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

Step 2 20: 1, 2, 4, 5, 10, 20

Step 3 On both lists: 1, 2, 4

Answer **1, 2, 4**

TRY IT WITH HELP

fill in each step

1. Find the common factors of 15 and 35.

Step 1 15: 1, _____, 5, 15

Step 2 35: 1, 5, _____, 35

Step 3 On both lists: _____ and _____

2. Find the common factors of 16 and 24.

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

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

Step 3 On both lists: 1, 2, _____, _____

YOUR TURN

use the steps on your own

3. List the common factors of each pair.

a. 12 and 18: _____

b. 10 and 15: _____

c. 14 and 21: _____

d. 20 and 30: _____

Divide by a Common Factor

Builds on Grade 4 · 4.NBT.B.6

TODAY'S LESSON	You will factor $30c + 42$ as $6(5c + 7)$.
YOU NEED TO	Divide two numbers by a common factor, like $30 \div 6 = 5$ and $42 \div 6 = 7$. **You will use it in Practice Form A, problems 2, 6, and 7.**

STEPS TO FOLLOW

use these same steps on every problem

1. **Divide** the first number by the common factor.
2. **Divide** the second number by the common factor.
3. **Check**: multiply each answer by the factor.

WATCH ME

the steps in action

Divide 36 and 60 by 12.

Step 1 $36 \div 12 = 3$

Step 2 $60 \div 12 = 5$

Step 3 $12 \times 3 = 36$ and $12 \times 5 = 60$

Answer **3 and 5**

TRY IT WITH HELP

fill in each step

4. Divide 18 and 24 by 6.

Step 1 $18 \div 6 =$ _____

Step 2 $24 \div 6 =$ _____

Step 3 $6 \times 3 =$ _____ and $6 \times 4 =$ _____

5. Divide 14 and 35 by 7.

Step 1 $14 \div 7 =$ _____

Step 2 $35 \div 7 =$ _____

Step 3 $7 \times 2 =$ _____ and $7 \times 5 =$ _____

YOUR TURN

use the steps on your own

6. Divide both numbers by the common factor.

a. 12 and 20 by 4 _____

b. 15 and 35 by 5 _____

c. 20 and 45 by 5 _____

d. 16 and 40 by 8 _____

e. 24 and 36 by 12 _____

f. 10 and 25 by 5 _____

READY CHECK

a problem like the one in today's lesson

7. Which shows $18x + 12$ factored with the GCF?

A $6(3x + 2)$ **B** $2(9x + 6)$ **C** $6(3x + 12)$ **D** $3(6x + 4)$

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