Name_____ Date_____ Period_____

LESSON 3-5 · SESSION 1 · PRACTICE · FORM A

Comparing Ratios with Common Terms

Learning target – I can compare two ratios by scaling them until they share a common term. · 6.RP.A.3b

REMEMBER

- To compare two ratios, **scale** them until one term is the **same** in both. Use a common multiple.
- Then compare the **other** term. Less water for the same soap means a **stronger** mix.
- Never compare the raw numbers: 3 : 7 vs 2 : 5 is not settled by 7 > 5.

WORKED EXAMPLE

Mix A has 2 soap to 5 water. Mix B has 3 soap to 7 water. Which is stronger?

Step 1 Common multiple of 2 and 3: 6.

Step 2 Mix A × 3 = 6 : 15. Mix B × 2 = 6 : 14.

Step 3 Compare water: 14 < 15.

Answer **Mix B is stronger (less water for 6 soap)**

WORDS **common multiple** *(múltiplo común)* · **least common multiple** *(mínimo común múltiplo)* · **stronger / weaker** *(más fuerte / más débil)*

PRACTICE

show your work · label units

1. Scale each ratio so the first term is 12.

a. 3 : 8 = 12 : ____

b. 2 : 5 = 12 : ____

c. 4 : 9 = 12 : ____

d. 6 : 7 = 12 : ____

2. **Purple Paint.** Mix A uses 3 cups red to 4 cups blue. Mix B uses 2 cups red to 3 cups blue. Complete the table. Which mix is bluer?

Hint *Make the red 6 cups in both mixes.*

	Red (cups)	Blue (cups)
Mix A × 2	6	
Mix B × 3	6	

Bluer mix_____

3. **Orange Juice.** Pitcher 1 has 3 cans of juice to 5 cans of water. Pitcher 2 has 2 cans of juice to 3 cans of water.

Hint *Scale both pitchers to 6 cans of juice.*

a. Scale both to 6 cans: _____

b. Which is more orange? _____

Show your work.

4. **Plant Food.** Bottle M mixes 5 drops of plant food with 9 ounces of water. Bottle N mixes 4 drops with 7 ounces.

a. Scale both to 20 drops: _____

b. Which is stronger? _____

Show your work.

5. **Hot Cocoa.** Cup A has 2 scoops of cocoa in 6 oz of milk. Cup B has 3 scoops in 8 oz. Scale both to 6 scoops. Which cup is more chocolatey?

Hint *A × 3 and B × 2.*

Show your work.

Cup_____

6. **Pool Chlorine.** Pool 1 uses 5 tablets for 10,000 gallons. Pool 2 uses 3 tablets for 5,000 gallons. Which pool has more chlorine per gallon?

Hint *Scale Pool 2 up to 10,000 gallons.*

Show your work.

Pool_____

7. **Bubble Solution.** Jar 1: 3 spoons of soap to 7 cups of water. Jar 2: 5 spoons to 12 cups. Scale both to 15 spoons of soap. Which is stronger?

Show your work.

Jar_____

8. **Team Wins.** Team 1 wins 4 of every 9 games. Team 2 wins 5 of every 12 games.

a. Scale both to 20 wins: _____

b. Which team wins a larger share of its games? Why? _____

Show your work.

FIND THE ERROR

explain the mistake, then fix it

9. **Priya's Work.** Mix A: 2 cups white to 5 cups green. Mix B: 3 cups white to 7 cups green. Priya says B is greener because 7 > 5. Explain her mistake. Which mix is greener?

_____

_____

_____

TEST PRACTICE

choose the best answer

10. To compare 2 : 3 and 3 : 5 fairly, you first make —

A the sums equal **B** one term equal **C** both terms 0 **D** the totals 10

11. Which cocoa mix is stronger: 1 scoop to 3 cups of milk, or 2 scoops to 5 cups of milk?

A 2 to 5 **B** 1 to 3 **C** the same **D** can't tell

SELF-CHECK CODE

find your answer · copy its letter into that problem's box · spell a math word

14	17	6 : 10	32	15 : 36	20 : 24	20 : 45	20 : 36	6 : 5
O	X	M	C	O	Z	N	M	Q

#1a	#1d	#3a	#4a	#7	#8a

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