Name_____ Date_____ Period_____

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

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 18.

a. 3 : 4 = 18 : ____

b. 2 : 7 = 18 : ____

c. 6 : 5 = 18 : ____

d. 9 : 10 = 18 : ____

2. **Purple Paint.** Mix A uses 4 cups red to 5 cups blue. Mix B uses 3 cups red to 4 cups blue. Complete the table. Which mix is bluer?

Hint *Make the red 12 cups in both mixes.*

	Red (cups)	Blue (cups)
Mix A × 3	12	
Mix B × 4	12	

Bluer mix_____

3. Orange Juice. Pitcher 1 has 4 cans of juice to 7 cans of water. Pitcher 2 has 3 cans of juice to 5 cans of water.

Hint *Scale both pitchers to 12 cans of juice.*

a. Scale both to 12 cans: _____

b. Which is more orange? _____

Show your work.

4. Plant Food. Bottle M mixes 3 drops of plant food with 8 ounces of water. Bottle N mixes 5 drops with 13 ounces.

a. Scale both to 15 drops: _____

b. Which is stronger? _____

Show your work.

5. Hot Cocoa. Cup A has 3 scoops of cocoa in 10 oz of milk. Cup B has 2 scoops in 7 oz. Scale both to 6 scoops. Which cup is more chocolatey?

Hint *A × 2 and B × 3.*

Show your work.

Cup_____

6. Pool Chlorine. Pool 1 uses 7 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: 2 spoons of soap to 5 cups of water. Jar 2: 3 spoons to 8 cups. Scale both to 6 spoons of soap. Which is stronger?

Show your work.

Jar_____

8. Team Wins. Team 1 wins 3 of every 8 games. Team 2 wins 4 of every 10 games.

a. Scale both to 12 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. Lucas's Work. Mix A: 3 cups red to 8 cups blue. Mix B: 4 cups red to 10 cups blue. Lucas says B is bluer because 10 > 8. Explain his mistake. Which mix is bluer?

_____

_____

_____

TEST PRACTICE

choose the best answer

10. Scaled so the first term is 12, the ratio 3 : 8 becomes —

A 12 : 17 **B** 12 : 32 **C** 12 : 24 **D** 36 : 8

11. Two cocoa mixes have the same amount of cocoa. The stronger mix has —

A more milk **B** less milk **C** more cups **D** the same milk

SELF-CHECK CODE

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

12 : 7	63	12 : 32	23	15	12 : 21	6 : 16	15 : 40	15 : 20
Z	**E**	**S**	**J**	**Q**	**U**	**L**	**A**	**X**

#1b	#1c	#3a	#4a	#7	#8a

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