Name_____ Date_____ Period_____

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

Equivalent Ratios and Tables

Learning target – I can build a ratio table by scaling both rows by the same factor. · 6.RP.A.3a

REMEMBER

- **Equivalent ratios** make the same comparison. Multiply or divide **both** terms by the **same** number.
- In a **ratio table**, each column is one pair. Find the factor, then use it on the other row.
- Adding the same number to both terms does **not** keep the ratio.

WORKED EXAMPLE

A mix uses 5 scoops of powder for every 2 cups of water. How much water for 15 scoops?

Step 1 Find the factor: 15 ÷ 5 = 3.

Step 2 Multiply the water by 3 too: 2 × 3 = 6.

Step 3 Check: 15 : 6 ÷ 3 = 5 : 2.

Answer **15 scoops go with 6 cups of water**

WORDS **equivalent ratios** *(razones equivalentes)* · **ratio table** *(tabla de razones)* · **scale factor** *(factor de escala)*

PRACTICE

show your work · label units

1. Find the missing number.

a. 5 × ___ = 35

b. ___ × 4 = 25.2

c. 2.6 × ___ = 20.8

d. ___ ÷ 4 = 7

e. 40 ÷ ___ = 8

f. 24.7 ÷ ___ = 3.8

2. **Lemonade Recipe.** A recipe uses 4 lemons for every 3 cups of syrup. Complete the table, then find the syrup for 20 lemons.

Hint *Count by 4s on the top row and by 3s on the bottom row.*

Lemons	4	8	12	16
Syrup (cups)	3			

Answer_____ cups for 20

3. **Granola Bars.** Granola bars need 5 cups of oats for every 2 cups of honey. Complete the ratio table.

Hint *Find what 5 was multiplied by, then use it on the 2.*

Oats (cups)	5	10		25
Honey (cups)	2		6	

4. Library Books. A library packs 36 books for every 9 carts. Scale down to complete the table.

Hint *Divide both rows by the same number each time.*

Books	36	12		4
Carts	9		2	

5. Trail Mix. A recipe uses 7 cups of nuts for every 4 cups of raisins. How many cups of raisins go with 35 cups of nuts?

Hint *35 ÷ 7 gives the scale factor.*

Show your work.

Answer_____ cups

6. Markers to Crayons. A kit has markers to crayons in a ratio of 3.5 to 7. How many crayons go with 21 markers?

Show your work.

Answer_____ crayons

7. Bike Ride. A cyclist rides 12.5 miles every 2.5 hours. How far does he ride in 7.5 hours?

Hint *2.5 hours × 3 = 7.5 hours.*

Show your work.

Answer_____ miles

8. Ribbons to Bows. A craft kit uses 1.5 yards of ribbon for every 4 bows.

a. Write two equivalent ratios that use only whole numbers. _____

b. Is 3.5 : 6 equivalent to 1.5 : 4? Explain. _____

Show your work.

FIND THE ERROR

explain the mistake, then fix it

9. Keisha's Work. Keisha says 3 : 5 and 6 : 8 are equivalent because she added 3 to each number. Explain her mistake. Then write a ratio that really is equivalent to 3 : 5.

_____

_____

_____

TEST PRACTICE

choose the best answer

10. Which ratio is equivalent to 3 : 4?

A 6 : 7 **B** 4 : 3 **C** 9 : 12 **D** 5 : 6

11. A ratio table has the columns 2 : 3 and 6 : 9. What was done to both rows?

A added 4 **B** multiplied by 3 **C** multiplied by 6 **D** added 6

SELF-CHECK CODE *find your answer · copy its letter into that problem's box · spell a math word*

32 Z	42 E	6.5 C	20 L	6.3 S	100.8 Q	37.5 D	15 A	19 X

#1b	#1f	#2	#5	#6	#7

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