Name_____ Date_____ Period_____

LESSON 6-1 · SESSION 1 · PRACTICE · FORM B

Dividing by a Unit Fraction

Learning target – I can divide a whole number by a unit fraction and explain what the quotient counts. · 6.NS.A.1

REMEMBER

- A **unit fraction** has 1 on top, like 1/3. Dividing by it asks: **how many pieces of that size fit?**
- **Keep, Change, Flip:** keep the first number, change ÷ to ×, flip the divisor. 4 ÷ 1/3 = 4 × 3.
- The quotient is **greater** than the number you start with. Check: quotient × divisor = start.

WORKED EXAMPLE

A cook has 4 cups of broth. How many 1/3-cup servings can she pour?

Step 1 Write the division: 4 ÷ 1/3.

Step 2 Keep 4, change ÷ to ×, flip 1/3 to 3: 4 × 3 = 12.

Step 3 Check: 12 × 1/3 = 4 cups.

Answer **12 servings**

WORDS **unit fraction** *(fracción unitaria)* · **reciprocal** *(recíproco)* · **quotient** *(cociente)*

PRACTICE

show your work · label units

1. Divide. Think: how many of the unit fraction fit into the whole number?

a. 7 ÷ 1/2 = _____ **b.** 2 ÷ 1/4 = _____ **c.** 8 ÷ 1/3 = _____

d. 4 ÷ 1/5 = _____ **e.** 6 ÷ 1/10 = _____ **f.** 5 ÷ 1/8 = _____

2. **Oats and Seeds.** Ms. Patel has 6 pounds of oats and 3 pounds of seeds. Each bar is 1 pound.



a. Each bird feeder uses 1/3 pound of oats. How many feeders? _____ feeders

b. She splits the seeds into 1/4-pound packets. Use the bars: how many packets? _____ packets

3. Garden Edging. A gardener has 10 feet of edging. Each small bed needs 1/4 foot. How many beds can he edge?

Hint *Each foot holds 4 fourths.*

Show your work.

Answer_____ beds

4. Frozen Yogurt. A snack cart has 4 quarts of frozen yogurt. Each sample cup holds 1/6 quart. How many cups can it fill?

Hint *Count sixths: 6 in each quart.*

Show your work.

Answer_____ cups

5. Water Bottles. A camp has 9 gallons of water. Each bottle holds 1/2 gallon. Theo says only 4.5 bottles can be filled. Justify or correct his answer.

Hint *Ask: how many halves are in 9 wholes?*

Show your work.

Answer_____ bottles

6. Tape Pieces. Keisha cuts a 3-yard roll of tape into pieces that are each 1/10 yard long. She gives 12 pieces to a friend.

Hint *Divide first, then subtract the 12 pieces.*

a. How many pieces does she cut? _____ pieces

b. How many are left? _____ pieces

Show your work.

7. Craft Table. A teacher has 10 meters of yarn for bracelets.

a. Each bracelet uses 1/5 meter. How many bracelets? _____ bracelets

b. Each bracelet uses 1/2 meter instead. How many bracelets? _____ bracelets

c. Why does a larger piece for each bracelet give fewer bracelets? _____

Show your work.

8. Explain It. Find 7 ÷ 1/5.

Hint *How many fifths are in 1 whole? In 7 wholes?*

a. Write the multiplication that matches this division and solve. _____

b. Explain why the answer is greater than 7. _____

FIND THE ERROR

explain the mistake, then fix it

9. Amir's Work. Amir solved 4 ÷ 1/5. He flipped the first number and wrote 1/4 × 1/5 = 1/20. Explain his mistake. Then find the correct quotient.

TEST PRACTICE

choose the best answer

10. Find 3 ÷ 1/6.

A 1/2 **B** 1/18 **C** 9 **D** 18

11. The reciprocal of 1/9 is –

A 1/9 **B** 9 **C** 0.9 **D** –9

SELF-CHECK CODE

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

2/3 Z	40 G	4.5 Q	30 U	18 O	50 P	42 X	35 S	24 R

#3	#4	#5	#6a	#7a	#8a

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