Name_____ Date_____ Period_____

LESSON 6-2 · SESSION 2 · PRACTICE · FORM B

Dividing with Mixed Numbers

Learning target – I can divide mixed numbers by writing them as improper fractions first. · 6.NS.A.1

REMEMBER

- Write each mixed number as an **improper fraction**: 2 3/4 = (2 × 4 + 3)/4 = 11/4.
- Then **multiply by the reciprocal** of the divisor.
- Simplify. Write an improper answer as a **mixed number**.

WORKED EXAMPLE

A ribbon is 6 3/4 meters long. Each bow uses 2 1/4 meters. How many bows can be made?

Step 1 Convert: 6 3/4 = 27/4 and 2 1/4 = 9/4.

Step 2 Multiply by the reciprocal: 27/4 × 4/9 = 108/36.

Step 3 Simplify: 108/36 = 3. Check: 3 × 2 1/4 = 6 3/4.

Answer **3 bows**

WORDS **mixed number** *(número mixto)* · **improper fraction** *(fracción impropia)* · **simplify** *(simplificar)*

PRACTICE

show your work · label units

1. Divide. Write each quotient in simplest form.

a. 4 2/3 ÷ 1 1/6 = _____ **b.** 2 5/8 ÷ 7/8 = _____ **c.** 6 1/4 ÷ 1 1/4 = _____

d. 3 1/3 ÷ 1/4 = _____ **e.** 2 1/4 ÷ 4 1/2 = _____ **f.** 3 3/5 ÷ 6 = _____

2. **Paper and Sand.** Ms. Chen has a 5 1/4-foot strip of poster paper and 8 3/4 pounds of sand.

a. She cuts the paper into 3/8-foot sections. How many sections? _____ sections

b. Each tub holds 1 3/4 pounds of sand. How many tubs? _____ tubs

Show your work.

3. **Paint Coats.** A painter has 6 2/3 liters of paint. Each coat uses 1 2/3 liters. How many coats can he paint?

Hint *6 2/3 = 20/3 and 1 2/3 = 5/3.*

Show your work.

Answer_____ coats

4. **Yarn Scarves.** Ana has 13 1/2 yards of yarn. Each scarf needs 2 1/4 yards. How many scarves can she knit?

Hint *Write 13 1/2 as 27/2.*

Show your work.

Answer_____ scarves

5. Sugar Scoops. A jar holds 5 1/2 cups of sugar. Elena says it fills 2 3/4 half-cup scoops. Justify or correct her.

Hint *More scoops or fewer scoops than cups?*

Show your work.

Answer_____ scoops

6. Door Trim. A shop has 14 1/4 ft of trim. A door uses 4 1/4 ft. The rest is cut into 1 1/4-ft pieces.

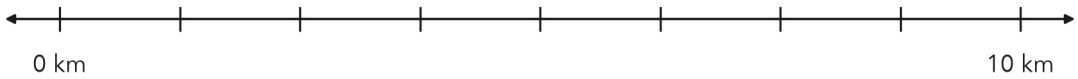
Hint *Subtract first, then divide by 5/4.*

a. How much trim is left? _____ ft

b. How many pieces? _____ pieces

Show your work.

7. Water Stations. A race course is 10 km long. Water stations are placed every 2 1/2 km, starting at the 2 1/2 km point. Ticks are every 1 1/4 km.



a. How many 2 1/2-km spacings fit along the course? _____ spacings

b. How many stations are placed, counting the one at the finish? _____ stations

c. Why are the two counts the same? _____

8. Punch Pitchers. A jug holds 8 3/4 cups of punch. Each pitcher holds 1 1/4 cups. How many pitchers can be filled? Check by multiplying.

Hint *Check: 7 × 1 1/4 should equal 8 3/4.*

Show your work.

Answer_____ pitchers

FIND THE ERROR

explain the mistake, then fix it

9. Jada's Work. Jada solved 3 2/5 ÷ 4/5. She wrote 3 2/5 = 5/5, then 5/5 × 5/4 = 1 1/4. Explain her mistake. Then find the correct quotient.

_____

_____

_____

TEST PRACTICE

choose the best answer

10. Written as an improper fraction, 4 2/3 is –

A 8/3 **B** 14/3 **C** 6/3 **D** 10/3

11. Find 2 1/2 ÷ 1 1/4.

A 1/2 **B** 2 1/8 **C** 2 **D** 3 1/8

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

6 V	5 I	7 S	4 N	8 T	11 2/5 Z	1/4 X	2 3/4 Q	11 E	10 R

#2b	#3	#4	#5	#6a	#6b	#8

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