Chapter 2

Multiply and Divide Fractions

2.1D Multiply Fractions and Whole Numbers

- Main Idea: Multiply fractions and whole numbers.

Steps:

- Write the whole number as a fraction.
- Multiply the numerators and multiply the denominators.
- Simplify if needed.

Examples: Multiply

1) $3 \times \frac{1}{5}$

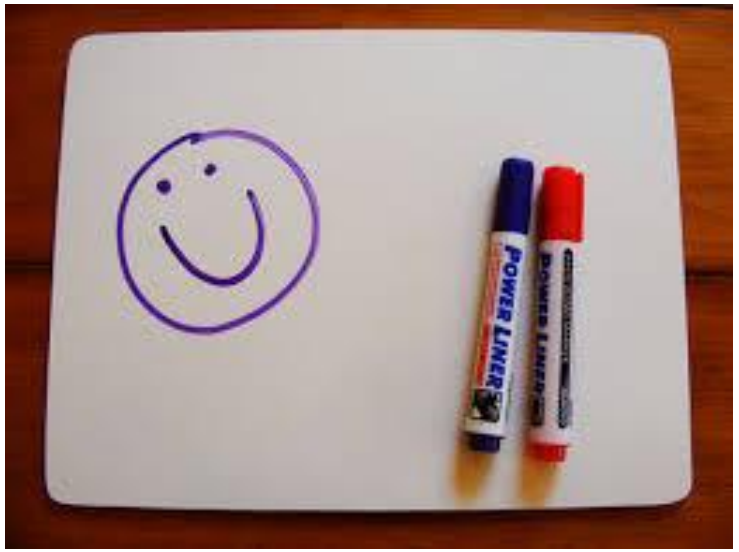
2) $\frac{5}{8} \times 7$

3) $\frac{1}{5} \times 9$

Real World Problem:

A little brown bat spends 5/6 of its life asleep. If a little brown bat lives to be 24 years old, how many years does it spend asleep?

WHITEBOARD PRACTICE



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Homework:

p.100 #1 – 25 odd

2.2B Multiply Fractions

- Main Idea: Multiply fractions

Steps:

1) Multiply the numerators and multiply the denominators.

2) Simplify if needed.

Examples: Multiply

1) $\frac{1}{5} \times \frac{1}{6}$

2) $\frac{3}{7} \times \frac{2}{9}$

3)

Real World Problem:

Hannah used $\frac{1}{2}$ of her beads to make a necklace. She used 2/5 of the remaining beads to make a bracelet. What fraction of the total beads did she use to make a bracelet?

Exit Slip:

On scrap paper:

Write 3 things you learned today.

Write 2 things you already knew.

Write 1 thing you are still unsure about.

When finished, place in the 'Inbox'.

Homework:

p.108 #9 – 31 odd, 39, 41

2.2D Multiply Mixed Numbers

- Main Idea: Multiply Mixed Numbers

Review: Changing mixed numbers to improper fractions

Steps:

1) Rewrite the mixed numbers as improper fractions

2) Multiply the numerators and multiply the denominators

3) Simplify if needed

Examples: Multiply

1) $\frac{1}{3} \times 6\frac{3}{7}$

2) $3\frac{3}{4} \times 2\frac{4}{5}$

Real World Problem:

Ryan is making banana bread for a class bake sale. The recipe calls for $1\frac{3}{4}$ cups of brown sugar. He is making $5\frac{1}{2}$ times the recipe. How much brown sugar does Ryan need?

Activity:

4 dice

Homework:

p.114 # 8 – 25 odd, 26, 29 - 32

Mid-Chapter Test

2.3B Divide Whole Numbers by Fractions

- Main Idea: Divide whole numbers by fractions

Reciprocals:

- Any two numbers with a product of 1

How to divide a whole number by a fraction:

- Multiply by its reciprocal
- Change the division to multiplying by the reciprocal

Examples: Divide. Write in simplest form.

1) $6 \div \frac{1}{3}$

2) $5 \div \frac{2}{3}$

Real World Example: A relay race is 4 miles long. If each runner in the race runs 2/3 mile, how many runners are in the race.

Homework:

p.122 #11 – 26, 28

2.3D Divide Fractions

- Main Idea: Divide fractions and justify procedures for dividing fractions

Dividing fractions.

- Change division to multiplying by the reciprocal.

Examples: Divide. Write in simplest form.

1) $\frac{1}{2} \div \frac{1}{4}$

2) $\frac{1}{3} \div \frac{5}{6}$

Real World Example: A neighborhood garden that is 2/3 of an acre is to be divided into 4 equal size areas. What is the size of each area?

Homework:

p.128 #9 – 21 odd, 23 - 26

2.3E Divide Mixed Numbers

- Main Idea: Divide mixed numbers

To Divide Mixed Numbers:

1) Change mixed numbers to improper fractions.

2) Change division to multiplying by reciprocal.

Examples:

1) $4\frac{1}{5} \div 2\frac{1}{3}$

2) $8 \div 2\frac{1}{2}$

3) $1\frac{5}{9} \div 2\frac{1}{3}$

Real World Example: Ryan is cutting a roll of cookie dough into slices that are 3/8 inch thick. If the roll is 10 $\frac{1}{2}$ inches long, how many slices can he cut?

Homework:

p.132 #7 – 21 odd, 24

Chapter 2 End Test