

## Course 1 Dailey - Rising 6<sup>th</sup> Graders Welcome to Middle School

### Rising 6th Graders

You will be working on the following packet to be turned in on the first day you return from summer break. This packet will focus on the skills you learned in 5<sup>th</sup> grade. They will focus mainly on fractions, decimals, and order of operation. You are also required to memorize your multiplication facts for 1-12. You can probably pick up multiplication cards from the dollar store, or you can make them yourselves. If you would like to bring them to school the first day I will give you extra credit. Your first performance grade will be your summer work so please make sure you complete it before you return to school.

Please note: The purpose of this assignment is practice in skills that you have covered this last year in your 5th grade math class and to prevent the summer slide. 😊

I hope you all have a fabulous summer and I can't wait to meet you next school year.

Name \_\_\_\_\_



# Adding and Subtracting Fractions

In Fifth Grade, we learned how to add, subtract, and multiply fractions.

## Adding and Subtracting Fractions

Remember when adding and subtracting fractions, you must have the same denominators!



$$\frac{7}{8} + \frac{1}{4} = \frac{7}{8} + \frac{2}{8} = \frac{9}{8}$$

Remember to simplify your answers!

Simplifying means to reduce or divide a fraction by a common number until it cannot be divided down anymore.



For example:

$$\frac{18}{36} \div \frac{2}{2} = \frac{9}{18} \div \frac{3}{3} = \frac{3}{6} \div \frac{3}{3} = \frac{1}{2}$$

## Practice

$$\frac{42}{48} =$$

$$\frac{121}{144} =$$

$$\frac{6}{36} =$$

$$\frac{25}{40} =$$

$$\frac{7}{49} =$$

$$\frac{45}{60} =$$

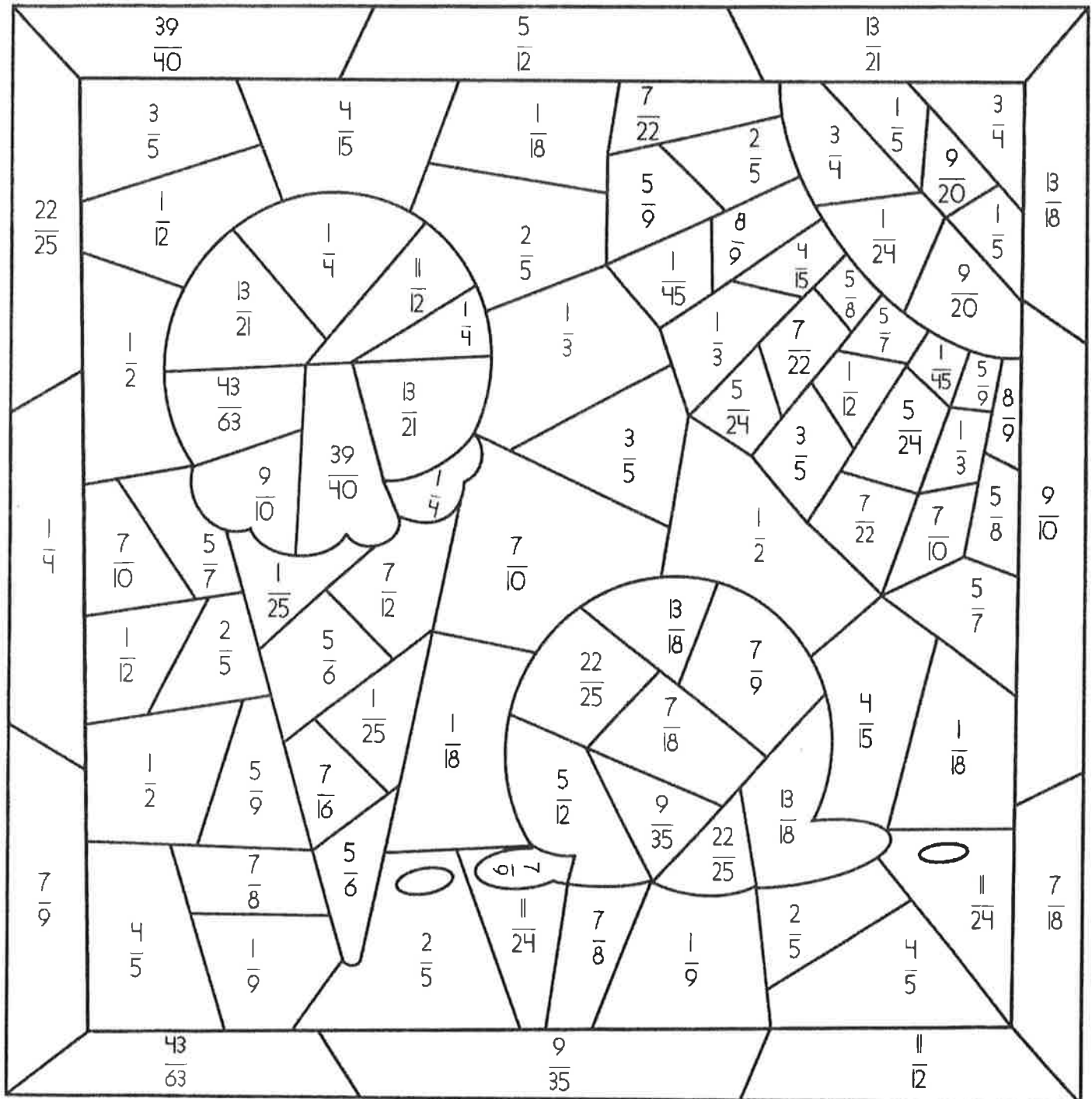
$$\frac{26}{65} =$$

$$\frac{27}{81} =$$

[illegible]

# Summer Fraction Mystery Picture 1

Solve the problems on the next pages. Simplify the fraction answer.  
Find the answer in the puzzle and color.



Name \_\_\_\_\_

# Summer Fraction Mystery Picture 1



Solve the following. Simplify the fraction or mixed number answer.  
Find the answer in the puzzle and color.

$\frac{1}{2} + \frac{5}{12} =$	$\frac{35}{36} - \frac{5}{9} =$	$\frac{3}{8} + \frac{1}{4} =$	$\frac{3}{4} - \frac{2}{3} =$
Color Pink	Color Green	Color Yellow	Color Blue
$\frac{3}{4} - \frac{3}{10} =$	$\frac{9}{10} - \frac{1}{2} =$	$\frac{1}{9} + \frac{2}{3} =$	$\frac{3}{10} + \frac{1}{2} =$
Color Orange	Color Light Brown	Color Green	Color Light Brown
$\frac{3}{10} + \frac{3}{10} =$	$\frac{3}{8} - \frac{1}{6} =$	$\frac{1}{10} + \frac{7}{8} =$	$\frac{7}{9} - \frac{2}{3} =$
Color Blue	Color Yellow	Color Pink	Color Light Brown
$\frac{21}{25} - \frac{4}{5} =$	$\frac{49}{50} - \frac{1}{10} =$	$\frac{5}{6} - \frac{7}{9} = \frac{1}{18}$	$\frac{1}{4} + \frac{9}{20} =$
Color Dark Brown	Color Green	Color Blue	Color Blue
$\frac{1}{6} + \frac{1}{10} =$	$\frac{4}{7} + \frac{1}{9} =$	$\frac{1}{6} - \frac{1}{8} =$	$\frac{2}{9} + \frac{2}{3} =$
Color Blue	Color Pink	Color Orange	Color Yellow

Name \_\_\_\_\_



# Summer Fraction Mystery Picture 1

Solve the following. Simplify the fraction answer. Find the answer in the puzzle and color.

$\frac{8}{9} - \frac{1}{3} =$	$\frac{5}{9} + \frac{1}{6} =$	$\frac{1}{2} + \frac{1}{4} =$	$\frac{8}{9} - \frac{13}{15} =$
Color Blue	Color Green	Color Orange	Color Yellow
$\frac{13}{15} - \frac{2}{3} =$	$\frac{7}{8} - \frac{5}{12} =$	$\frac{3}{8} - \frac{1}{24} =$	$\frac{3}{4} - \frac{1}{6} =$
Color Orange	Color Light Brown	Color Blue	Color Dark Brown
$\frac{1}{12} + \frac{3}{4} =$	$\frac{3}{11} + \frac{1}{2} =$	$\frac{6}{7} - \frac{6}{14} =$	$\frac{5}{8} + \frac{1}{4} =$
Color Dark Brown	Color Yellow	Color Blue	Color Light Brown
$\frac{5}{8} - \frac{3}{8} =$	$\frac{6}{7} - \frac{3}{5} =$	$9\frac{1}{7} - 8\frac{3}{7} =$	$\frac{2}{7} + \frac{1}{3} =$
Color Pink	Color Green	Color Blue	Color Pink
$\frac{1}{2} - \frac{1}{16} =$	$6\frac{3}{5} - 5\frac{7}{10} =$	$\frac{5}{9} - \frac{1}{6} =$	$2\frac{1}{5} - 1\frac{4}{5} =$
Color Dark Brown	Color Pink	Color Green	Color Blue

Name \_\_\_\_\_

## Multiplying Fractions

In Fifth Grade, we learned how to add, subtract, and multiply fractions.

### Multiplying Fractions

Remember when multiplying fractions, you can just multiply straight across.

$$\frac{4}{5} \times \frac{5}{8} = \frac{20}{40} = \frac{1}{2}$$

However, to save time in simplifying, you can use your cross-cancelling skills.

Remember that is when you divide a numerator from one fraction and a denominator from the other fraction by the same number. Essentially, you are simplifying before you even start multiplying.

For example:

$$\begin{array}{c} | \quad 4 \quad 5 \quad | \\ \frac{4}{5} \times \frac{5}{8} = \frac{20}{40} = \frac{1}{2} \\ | \quad \quad \quad 2 \end{array}$$

9

### Practice

$$\frac{2}{8} \times \frac{16}{20} =$$

$$\frac{8}{18} \times \frac{9}{16} =$$

$$\frac{7}{10} \times \frac{50}{77} =$$

$$\frac{3}{9} \times \frac{3}{6} =$$

$$\frac{6}{21} \times \frac{14}{18} =$$

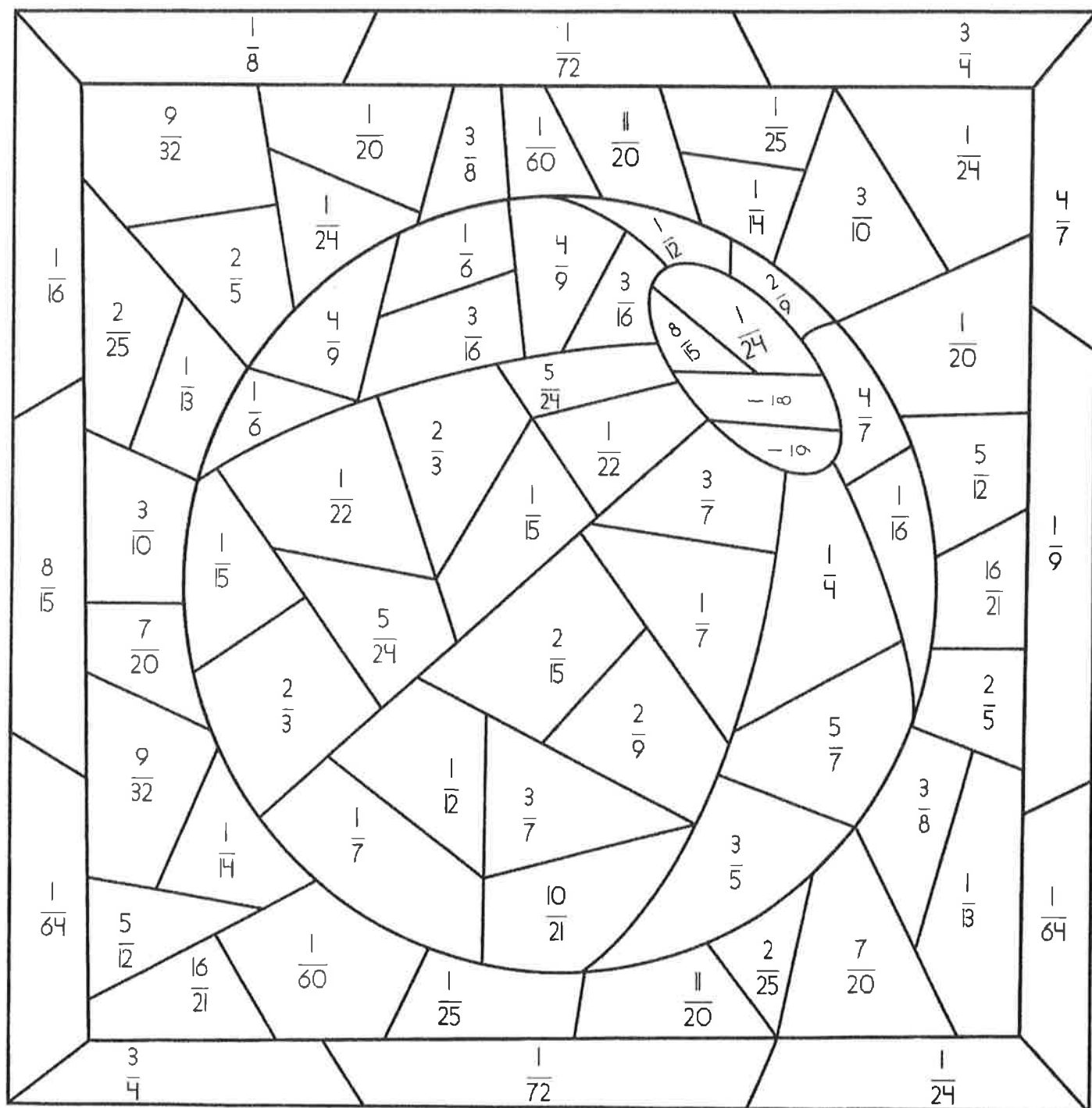
$$\frac{13}{15} \times \frac{45}{65} =$$

Name \_\_\_\_\_



# Summer Fraction Mystery Picture 2

Solve the following. Simplify the fraction answer. Find the answer in the puzzle and color.



Name \_\_\_\_\_



## Summer Fraction Mystery Picture 2

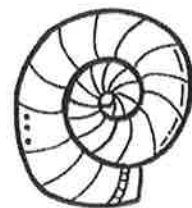
Solve the following. Simplify the fraction answer. Find the answer in the puzzle and color.

$\frac{3}{4} \times \frac{1}{9} =$	$\frac{3}{8} \times \frac{10}{18} =$	$\frac{9}{10} \times \frac{4}{6} =$	$\frac{1}{5} \times \frac{5}{8} =$
Color Red	Color Dark Blue	Color Purple	Color Yellow
$\frac{2}{24} \times \frac{6}{8} =$	$\frac{3}{8} \times \frac{4}{8} =$	$\frac{6}{7} \times \frac{8}{9} =$	$\frac{3}{4} \times \frac{16}{18} =$
Color Orange	Color Green	Color Light Blue	Color Dark Blue
$\frac{81}{90} \times \frac{3}{9} =$	$\frac{6}{7} \times \frac{2}{12} =$	$\frac{13}{65} \times \frac{5}{13} =$	$\frac{8}{25} \times \frac{1}{4} =$
Color Light Blue	Color Red	Color Light Blue	Color Light Blue
$\frac{10}{60} \times \frac{10}{100} =$	$\frac{7}{10} \times \frac{5}{21} =$	$\frac{4}{7} \times \frac{28}{40} =$	$\frac{3}{10} \times \frac{4}{9} =$
Color Light Blue	Color Green	Color Light Blue	Color Red
$\frac{1}{2} \times \frac{1}{7} =$	$\frac{2}{11} \times \frac{1}{4} =$	$\frac{1}{9} \times \frac{3}{8} =$	$\frac{1}{8} \times \frac{1}{8} =$
Color Light Blue	Color Dark Blue	Color Yellow	Color Orange



Name \_\_\_\_\_

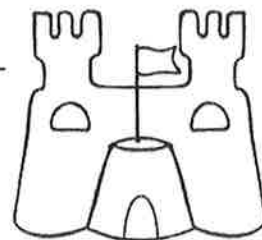
# Summer Fraction Mystery Picture 2



Solve the following. Simplify the fraction answer. Find the answer in the puzzle and color.

$\frac{6}{72} \times \frac{9}{54} =$	$\frac{8}{9} \times \frac{1}{4} =$	$\frac{3}{8} \times \frac{1}{9} =$	$\frac{1}{6} \times \frac{2}{3} =$
Color Orange	Color Red	Color Light Blue	Color Yellow
$\frac{39}{40} \times \frac{10}{13} =$	$\frac{5}{9} \times \frac{63}{100} =$	$\frac{8}{9} \times \frac{27}{54} =$	$\frac{3}{4} \times \frac{1}{15} =$
Color Yellow	Color Light Blue	Color Green	Color Light Blue
$\frac{7}{8} \times \frac{40}{49} =$	$\frac{5}{8} \times \frac{12}{20} =$	$\frac{99}{100} \times \frac{5}{9} =$	$\frac{3}{8} \times \frac{3}{4} =$
Color Purple	Color Light Blue	Color Light Blue	Color Light Blue
$\frac{3}{5} \times \frac{5}{7} =$	$\frac{32}{49} \times \frac{7}{8} =$	$\frac{11}{12} \times \frac{5}{11} =$	$\frac{5}{6} \times \frac{4}{7} =$
Color Red	Color Orange	Color Light Blue	Color Red
$\frac{4}{5} \times \frac{2}{3} =$	$\frac{1}{5} \times \frac{1}{5} =$	$\frac{3}{8} \times \frac{2}{3} =$	$\frac{3}{39} \times \frac{13}{15} =$
Color Yellow	Color Light Blue	Color Purple	Color Dark Blue

Name \_\_\_\_\_



## Comparing Fashionable Fractions

In Fifth Grade, we learned how to compare fractions.  
We used a variety of methods to help us.

### Equivalent Fraction Method

By changing one or both fractions into fractions with common denominators,  
we can easily compare them.

For example:

$$\frac{1}{2} \quad \text{-----} \quad \frac{3}{4}$$

Since the denominators are different, we find a common denominator of 4.

$\frac{1}{2} \times \frac{2}{2} = \frac{2}{4}$  then substitute the equivalent fraction into the problem.

$$\frac{2}{4} < \frac{3}{4}$$

Having a common denominator makes it easier to compare.

### Practice

$$\frac{1}{9} = \frac{2}{18} = \frac{3}{27} = \frac{4}{36}$$

$$\frac{5}{12} = \frac{10}{24} = \frac{15}{36} = \frac{20}{48}$$



$$\frac{3}{4} = \frac{6}{8} = \frac{9}{12} = \frac{12}{16}$$

$$\frac{4}{7} = \frac{8}{14} = \frac{12}{21} = \frac{16}{28}$$

Name \_\_\_\_\_

## Comparing Fashionable Fractions



In Fifth Grade, we learned how to compare fractions.  
We used a variety of methods to help us.

### Like Denominators or Like Numerators

If the fractions happen to share the same denominators, they are made from the same unit fractions.

For example:


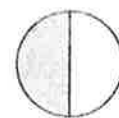
$$\frac{3}{7} \text{ ————— } \frac{2}{7}$$

$$\frac{3}{7} = \frac{1}{7} + \frac{1}{7} + \frac{1}{7} \quad \text{and} \quad \frac{2}{7} = \frac{1}{7} + \frac{1}{7} \text{ so ...}$$

$$\frac{3}{7} \text{ ————— } > \text{ ————— } \frac{2}{7}$$

If the fractions happen to share the same numerator, then the number of unit fractions is the same, but the portion (represented by the denominator) is different.

For example:


$$\frac{1}{4} \text{ ————— } < \text{ ————— } \frac{1}{2}$$


### Practice

$$\frac{1}{8} \text{ ————— } \frac{1}{10}$$

$$\frac{3}{4} \text{ ————— } \frac{3}{7}$$

$$\frac{1}{6} \text{ ————— } \frac{1}{12}$$

$$\frac{1}{100} \text{ ————— } \frac{1}{2}$$

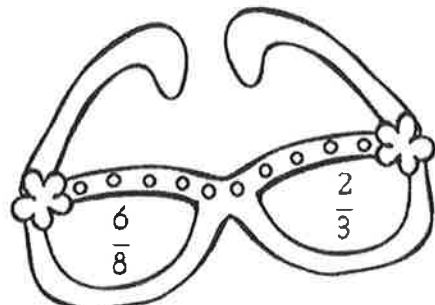
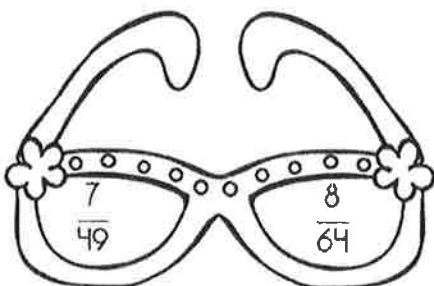
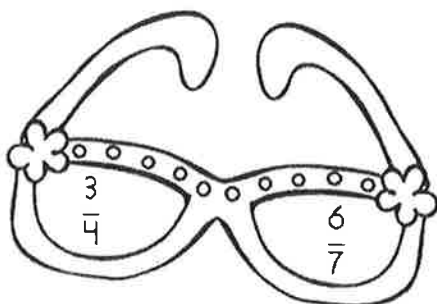
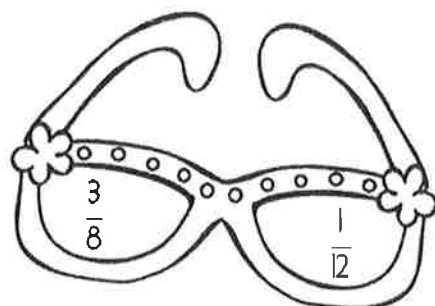
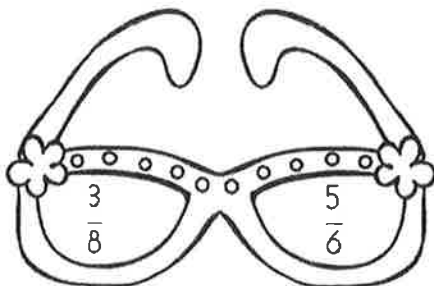
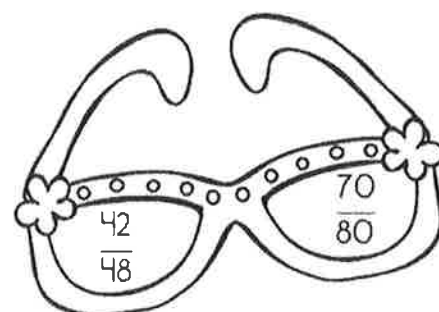
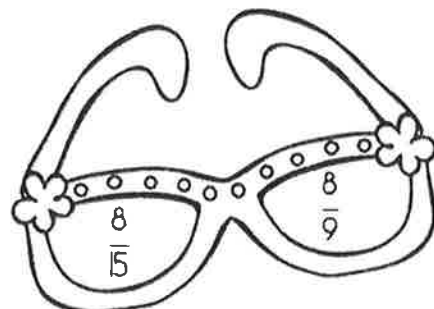
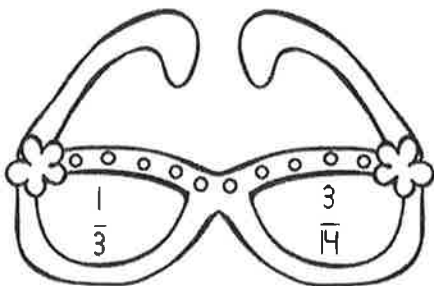
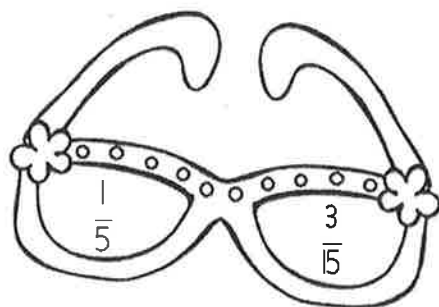
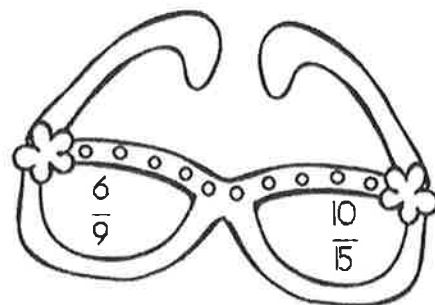
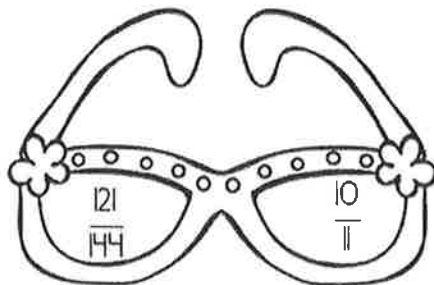
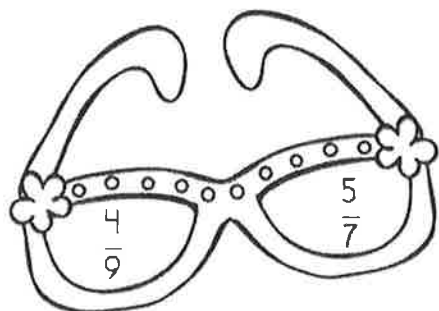
$$\frac{6}{7} \text{ ————— } \frac{1}{7}$$

$$\frac{9}{18} \text{ ————— } \frac{9}{10}$$

Name \_\_\_\_\_

## Comparing Fashionable Fractions

Circle the larger fraction in red, circle the smaller fraction in green. If they are equivalent fractions, circle both in blue.



Name \_\_\_\_\_

# Summer Decimal Mystery Picture 1

Find the answer to the problems on the next page. Color the square according to the key.

63	752.21	10	0.04	50	0.64	24.6	152.83	0.04	271.64	900	7.01
89.94	132.5	0.64	63	0.98	58.78	42.3	89.94	56	8.75	352	271.64
2.36	71	248	0.77	271.64	5	8.75	2.36	42.3	2.25	0.77	63
900	0.98	352	210	248	71	66	132.5	248	0.65	900	10
56	10	152.83	2.25	0.65	32.68	15	24.6	71	89.94	271.64	56
0.77	4.2	352	42.3	143.76	543	16.2	36.2	8.75	0.64	4.2	0.77
5	0.65	4.2	58.78	99.2	91.02	21	38.7	132.5	210	58.78	248
10	271.64	7.01	24.6	210	268	143.76	42.3	58.78	752.21	900	50
2.36	0.04	66	4.2	132.5	66	210	132.5	0.77	24.6	7.01	152.83
10	0.77	5	248	752.21	42.3	0.65	7.01	2.25	352	0.64	0.04
0.98	8.75	71	2.36	89.94	5	58.78	50	0.04	66	5	89.94
50	7.01	152.83	63	56	2.25	71	900	0.98	152.83	752.21	63

Name \_\_\_\_\_

# Summer Decimal Mystery Picture I



Find the answer to the problems on the next page. Color the square according to the key.

$8.6 \times 4.5 =$	$704 \times 5 =$	$8 \times 0.7 =$	$265 \times 0.2 =$
Color Yellow	Color Pink	Color Light Blue	Color Pink
$11.85 \div 7.9 =$	$53.55 \div 8.5 =$	$60 \times 0.07 =$	$0.32 \div 8 =$
Color Yellow	Color Light Blue	Color Pink	Color Light Blue
$147 \div 0.7 =$	$65 \div 0.13 =$	$11 \times 0.7 =$	$810 \div 0.9 =$
Color Pink	Color Light Blue	Color Light Blue	Color Light Blue
$1,000 \times 0.005 =$	$300 \times 0.22 =$	$24.8 \times 4 =$	$50 \times 0.2 =$
Color Pink	Color Pink	Color Yellow	Color Light Blue
$54.3 \times 0.1 =$	$152.04 \div 4.2 =$	$63.9 \div 9 =$	$0.8 \times 0.8 =$
Color Yellow	Color Yellow	Color Pink	Color Pink

Name \_\_\_\_\_

# Summer Decimal Mystery Picture I

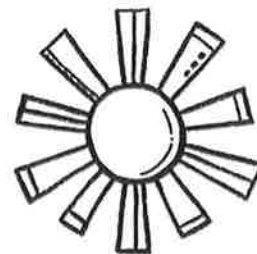


Find the answer to the problems on the next page. Color the square according to the key.

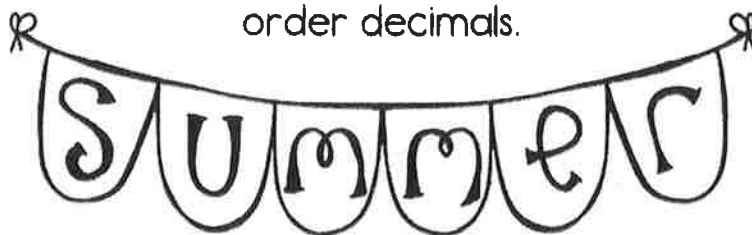
$4538 - 12.7 =$	$75 - 6.85 =$	$0.56 + 0.42 =$	$72.6 - 48 =$
Color Yellow	Color Pink	Color Light Blue	Color Pink
$19.75 + 7.05 =$	$14923 + 3.6 =$	$295 - 2702 =$	$1039.66 - 28745 =$
Color Yellow	Color Light Blue	Color Pink	Color Light Blue
$17 - 8.25 =$	$321 + 3.8 =$	$924 - 6.88 =$	$94.07 - 3.05 =$
Color Pink	Color Light Blue	Color Light Blue	Color Light Blue
$13.85 + 28.45 =$	$22 + 36.78 =$	$18.96 + 2.04 =$	$5082.72 - 4,811.08 =$
Color Pink	Color Pink	Color Yellow	Color Light Blue
$33.42 - 17.22 =$	$209.6 - 65.84 =$	$12 - 9.975 =$	$81.05 + 8.89 =$
Color Yellow	Color Yellow	Color Pink	Color Light Blue

Name \_\_\_\_\_

# Casually Comparing Decimals



In Fifth Grade, we learned to look  
at place value to compare and  
order decimals.



Put the numbers below into the table from greatest to least.

5,780.06

7,581.64

4,329.85

5,781.06

4,329.85

5,781.6

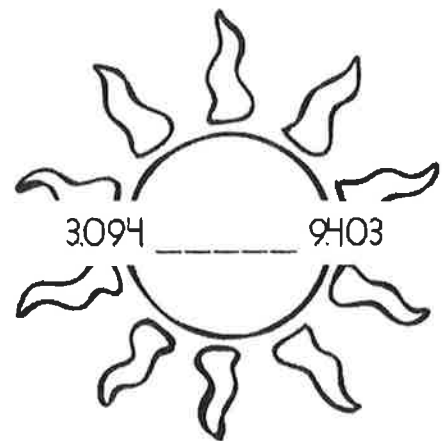
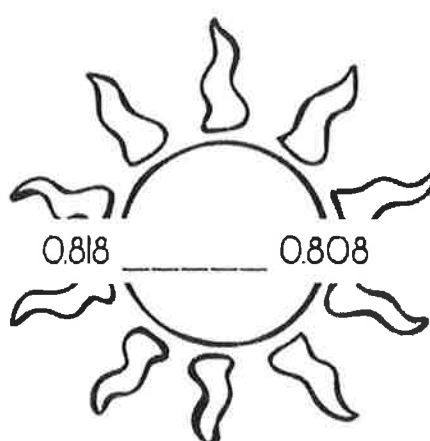
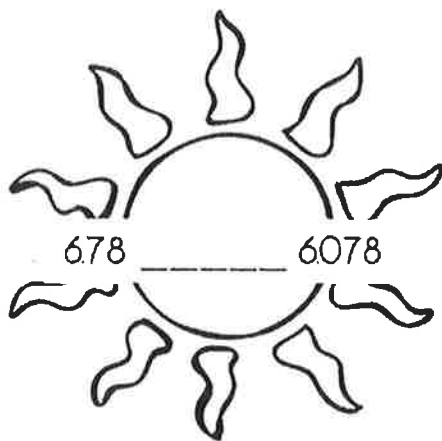
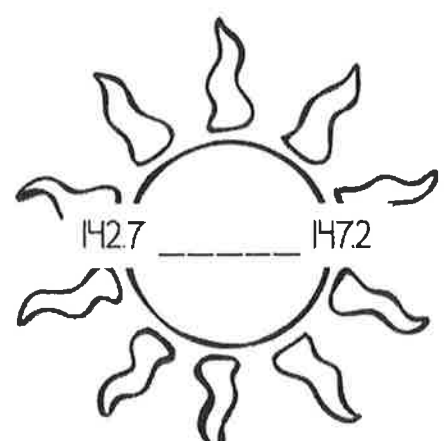
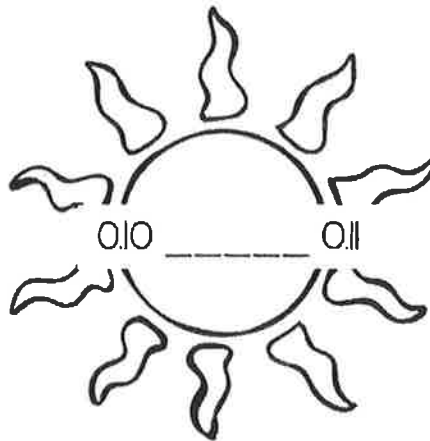
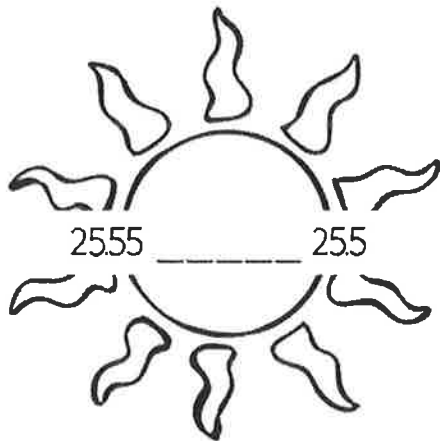
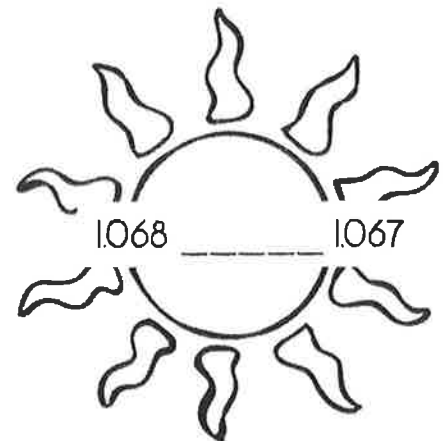
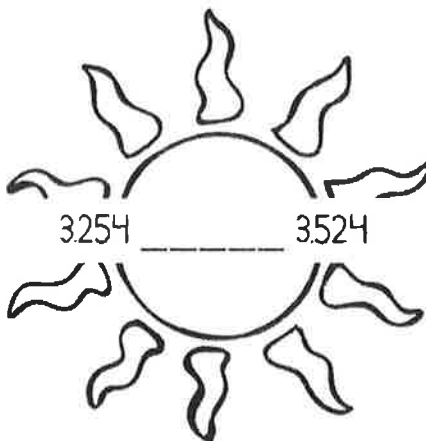
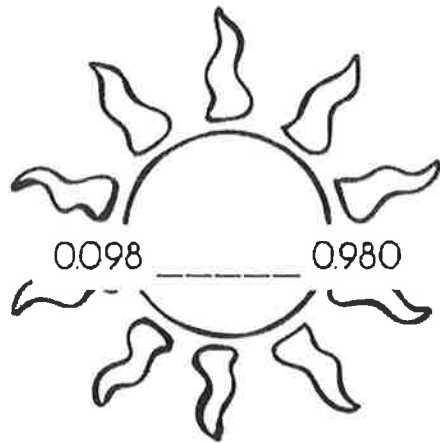
Thousands	Hundreds	Tens	Ones	Decimal	Tenths	Hundredths	Thousandths



Name \_\_\_\_\_

## Comparing Dreamy Decimals

Write if the decimals are greater than, less than, or equal.



Name \_\_\_\_\_



## Oceans of Operations

In Fifth Grade, we learned there is a special order we need to follow when performing multiple operations in a single problems.

- P** Parenthesis or brackets  
Solve the operations inside the parenthesis first. Work from the outside in.
- E** Exponents  
Solve any numbers with exponents
- M and D** Multiplication and division from left to right.  
Solve all of the multiplication and division problems going from left to right.
- A and S** Add and subtract from left to right.  
Solve all of the addition and subtraction problems going from left to right.

For example:

$$[(21 \div 3) + (9 \div 3) \times 10] =$$



$$[7 + 3 \times 10] =$$

$$7 + 30 = 37$$



Name \_\_\_\_\_



## Oceans of Operations

Use order of operations to solve the following.

$$[(39 \div 3) + (16 \div 8)] =$$

$$[42 - (6 \times 5)] \div 2 =$$

$$66 - 6 \times 5 + 4 =$$

$$(6 \times 0.5) + (48 \times 1.2) =$$

$$53 + 37 - 9 \times 10 =$$

$$(100 - 76) + (8 \times 8) =$$

$$(24 \times 0.6) \div 3 =$$

$$(81 \div 9) \times (3 \times 5) + 13 =$$

$$99 \div 3 + 9 \times 4 =$$