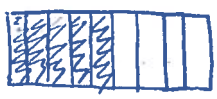
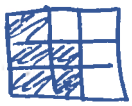
Name: _____ #: _____ Adding & Subtracting Fractions Practice

1) **PART A:** Look at the fraction below. CIRCLE the NUMERATOR (this number represent part of a whole) and DRAW AN ARROW to the DENOMINATOR (this number represents the number of parts in the whole): $\frac{5}{9}$

PART B: Draw a model to represent 5/9.


OR


2) You collected 2/9 of a pound of candy after a trip to your grandparents' house. You had 1/3 pound of candy leftover from a birthday party you attended. How much candy do you have altogether?

A) 5/9 B) 7/9 C) 2/3 D) 8/9

$\frac{2}{9} + \frac{1}{3} = \frac{15}{27} \div 3 = \frac{5}{9}$

3) The table below shows the amount of flour, in cups, needed to make different baked goods.

Project	Amount of Flour (in cups)
Sugar Cookies	2 ¾
Chocolate Crepes	1 ½
Peach Crumble	1
Butterscotch Bars	1 ¼
Cobbler	2

Emily is baking sweets for a bake sale. She has 4 ¼ cups of flour to use. What items from the table can Emily bake that will use EXACTLY 4 ¼ cups of flour. Write your answer below.

Butterscotch Bars, Cobbler, and Peach Crumble

OR

Sugar Cookies and Chocolate Crepes

4) At a pizza party, students ate 7 3/8 pepperoni pizzas and 3 1/2 cheese pizzas. How many pizzas were eaten altogether? $7\frac{3}{8} + 3\frac{1}{2} = \frac{59}{8} + \frac{7}{2}$

PART A: Select **ALL** the options that show an equation that can be used to solve the word problem above.

A) $7\frac{6}{16} + 3\frac{8}{16} =$ B) $\frac{56}{8} + \frac{24}{8} =$ C) $7\frac{3}{8} + 3\frac{1}{8} =$ D) $7\frac{3}{8} + 3\frac{4}{8} =$

PART B: Solve. HOW MANY PIZZAS WERE EATEN ALTOGETHER? $10\frac{7}{8}$

5) Choose the best answer. Simplifying may be needed to find the best choice. 5/9 + 6/8 =

A) 11/17

$\frac{5}{9} \times \frac{8}{8} = \frac{40}{72}$

$+ \quad \frac{6}{8} \times \frac{9}{9} = \frac{54}{72}$

$\frac{94}{72} = 1\frac{22}{72} = 1\frac{11}{36}$

B) 11/72

C) $\frac{11}{36}$

$\frac{5}{9} + \frac{6}{8} = \frac{94}{72} = 1\frac{22}{72} = 1\frac{11}{36}$

D) $1\frac{11}{72}$

9: 9, 18, 27, 36, 45, 54, 63, 72, 81

8: 8, 16, 24, 32, 40, 48, 56, 64, 72

6) The table below shows the amount of flour, in cups, needed to make different baked goods.

Project	Amount of Flour (in cups)
Sugar Cookies	2 ¾
Chocolate Crepes	1 ½
Peach Crumble	1
Butterscotch Bars	1 ¼
Cobbler	2

7) After a party, Brittany had leftover cakes. She has $\frac{1}{5}$ of a chocolate cake, $\frac{3}{10}$ of a strawberry cake, and $\frac{2}{15}$ of a Funfetti cake.

PART A: How much left over cake did Brittany have altogether? Write your answer in a complete sentence.

$\frac{1}{5}+\frac{3}{10}+\frac{2}{15}=\frac{6}{30}+\frac{9}{30}+\frac{4}{30}=\frac{19}{30}$ There is $\frac{19}{30}$ cake leftover from the party.

PART B: Brittany's brother, Steve, brought home 1/2 of a cake from a birthday party he attended. How much more cake does Brittany have than Steve? Write your answer in a complete sentence.

$\frac{19}{30}-\frac{1}{2}=\frac{19}{30}-\frac{15}{30}=\frac{4}{30}=\frac{2}{15}$ Brittany has $\frac{2}{15}$ more cake than Steve.

8) To make a gallon of fruit juice mix, Lola adds 3/8 gallon of grape juice with 5/16 gallon of apple juice. She fills the rest of the container with orange juice to make one gallon of fruit juice mix. How much orange juice will Lola need to add to make a whole gallon of juice? Write your answer in a complete sentence.

$\frac{3}{8}+\frac{5}{16}=\frac{6}{16}+\frac{5}{16}=\frac{11}{16}$ $1-\frac{11}{16}=\frac{16}{16}-\frac{11}{16}=\frac{5}{16}$ Lola will need $\frac{5}{16}$ more juice to fill the container.

9) Choose the best answer. Simplifying may be needed to find the best choice. 3/8 – 2/16 =

A) 5/16 B) 2/8 C) 1/8 D) 8/16

48 16 128 $\frac{48-16}{128}=\frac{32}{128}=\frac{1}{4}$

10 Find the difference in SIMPLEST form:

$12\frac{6}{10}-3\frac{7}{10}=\frac{126}{10}-\frac{37}{10}=\frac{89}{10}=8\frac{9}{10}$ $\frac{2}{8}=\frac{1}{4}$

A) $7\frac{1}{10}$ B) $8\frac{9}{10}$ C) $8\frac{1}{10}$ D) $9\frac{2}{10}$

Name_____ Date_____

SOL 4.5 Study Guide

Directions: Complete this study guide ~~over the weekend.~~ Please know how to do each and every problem on this study guide in order to prepare for our Math test.

1. What is the least common multiple of 6 and 9?

6: 6, 12, (18), 24, 30, 36, [illegible]
9: 9, (18), 27, 36, 45, 54, 63, 72

LCM: 18

2. Circle ALL of the common factors of 12 and 24.

(1) (2) (3) (4) (6) 7 8 9 (12)

GCF: 12

3. What is the greatest common factor of 12 and 15?

12:

(1)	12
2	6
(3)	4

15:

(1)	15
(3)	5

GCF: 3

4. Mr. Lewter made a list of all the common factors of 10 and 20. What would his list look like?

1, 2, 5, 10

10

(1)	(10)
(2)	(5)

20

(1)	20
4	(5)
(2)	(10)

LCM: 12

5. Solve and simplify. 3 2/3 + 4 1/4 =

$3\frac{2}{3} \times \frac{4}{4} = 3\frac{8}{12}$

$+ \quad 4\frac{1}{4} \times \frac{3}{3} = 4\frac{3}{12}$

$= (7\frac{11}{12})$

6. Subtract. Simplify your answer.

9/10 - 3/10 = $\frac{6}{10} = \frac{3}{5}$

$\frac{6}{10} \div \frac{2}{2} = \frac{3}{5}$

1.) Find the GCF
2.) Divide both the numerator and denominator by the GCF.

6		10
1	6	1 | 10
2	3	2 | 5

7. Subtract. Simplify your answer.

LCM: 24 To simplify

6/8 - 1/3 = $\frac{10}{24} = \frac{5}{12}$

$\frac{6}{8} \times \frac{3}{3} = \frac{18}{24}$

$-\ \frac{1}{3} \times \frac{8}{8} = \frac{8}{24}$

$= \frac{10}{24}$

$\frac{10}{24} \div \frac{2}{2} = \frac{5}{12}$

8: 8, 16, (24), 32

3: 3, 6, 9, 12, 15, 18, 21, (24)

8. Mrs. Sutherland and Mrs. Gettle shared a pizza for lunch. Mrs. Gettle ate 1/3 of the pizza and Mrs. Sutherland ate 2/5 of the pizza. How much pizza was eaten?

add

$\frac{1}{3} + \frac{2}{5} = \frac{11}{15}$

$\frac{1}{3} \times \frac{5}{5} = \frac{5}{15}$

$+\ \frac{2}{5} \times \frac{3}{3} = \frac{6}{15}$

$= \frac{11}{15}$

9. Mrs. Rumbaugh drank 2 1/4 cups of water in the morning, 3 1/3 cups of water in the afternoon, and 2/6 cup of water at night. How much water did Mrs. Rumbaugh drink by the end of the day?

4: 4, 8, (12), 16
3: 3, 6, 9, (12), 15
6: 6, (12), 18

$2\frac{1}{4} + 3\frac{1}{3} + \frac{2}{6}$

$\frac{9}{4} + \frac{7}{3} + \frac{2}{6}$

$\frac{9}{4} \times \frac{3}{3} = \frac{27}{12}$

$\frac{7}{3} \times \frac{4}{4} = \frac{28}{12}$

$\frac{2}{6} \times \frac{2}{2} = \frac{4}{12}$

$\frac{59}{12}$

DIVIDE!

$\frac{59}{12} = 4\frac{11}{12}$

To make an improper fraction a mixed number, you divide.

10. Challenge Question: Dylan and Zach shared a pizza for lunch. Dylan ate 1/6 of the pizza and Zach ate 1/4 of the pizza. In lowest terms, what fractional part of the pizza was left?

$\frac{1}{4} \times \frac{3}{3} = \frac{3}{12}$

$\frac{1}{6} + \frac{1}{4} = \frac{2}{12} + \frac{3}{12} = \frac{5}{12}$

$\frac{1}{6} \times \frac{2}{2} = \frac{2}{12}$

$\frac{12}{12} - \frac{5}{12} = \frac{7}{12}$

$\frac{7}{12}$ was left

11. Mr. Lewter needs 7/8 cups of sugar. If he already has 1/3 of a cup of sugar, how much more does he need?

subtract

$\frac{7}{8} \times \frac{3}{3} = \frac{21}{24}$

$\frac{1}{3} \times \frac{8}{8} = \frac{8}{24}$

$= \frac{13}{24}$

8: 8, 16, (24), 32

3: 3, 6, 9, 12, 15, 18, 21, (24)

LCM: 24