MATH Review BOOKLET

FRACTIONS

Name: _____

Date: _____

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Date: _____

Determine if the fraction pairs are equivalent.
Explain your answer.

1. $\frac{2}{8}$ $\frac{1}{4}$

2. $\frac{6}{8}$ $\frac{3}{4}$

3. $\frac{3}{9}$ $\frac{2}{3}$

4. $\frac{8}{10}$ $\frac{4}{5}$

5. $\frac{2}{3}$ $\frac{10}{15}$

Determine if the fraction pairs are equivalent.
Explain your answer.

1. $\frac{2}{8}$ $\frac{1}{4}$

2. $\frac{6}{8}$ $\frac{3}{4}$

3. $\frac{3}{9}$ $\frac{2}{3}$

4. $\frac{8}{10}$ $\frac{4}{5}$

5. $\frac{2}{3}$ $\frac{10}{15}$

1

Simplify the fractions.

1. $\frac{2}{8}$ _____
2. $\frac{6}{8}$ _____
3. $\frac{3}{9}$ _____
4. $\frac{8}{10}$ _____
5. $\frac{4}{6}$ _____
6. $\frac{6}{9}$ _____
7. $\frac{9}{12}$ _____
8. $\frac{8}{12}$ _____
9. $\frac{10}{14}$ _____
10. $\frac{6}{15}$ _____
11. $\frac{10}{15}$ _____
12. $\frac{2}{14}$ _____

Simplify the fractions.

1. $\frac{2}{8}$ _____
2. $\frac{6}{8}$ _____
3. $\frac{3}{9}$ _____
4. $\frac{8}{10}$ _____
5. $\frac{4}{6}$ _____
6. $\frac{6}{9}$ _____
7. $\frac{9}{12}$ _____
8. $\frac{8}{12}$ _____
9. $\frac{10}{14}$ _____
10. $\frac{6}{15}$ _____
11. $\frac{10}{15}$ _____
12. $\frac{2}{14}$ _____

2

Convert the mixed numbers to improper fractions.

1. $2\frac{1}{8}$ _____
2. $1\frac{1}{2}$ _____
3. $3\frac{1}{3}$ _____
4. $2\frac{6}{9}$ _____
5. $1\frac{4}{10}$ _____
6. $2\frac{3}{9}$ _____
7. $3\frac{1}{12}$ _____
8. $2\frac{8}{12}$ _____
9. $4\frac{5}{11}$ _____
10. $2\frac{2}{15}$ _____
11. $3\frac{2}{12}$ _____
12. $2\frac{6}{14}$ _____

3

Convert the mixed numbers to improper fractions.

1. $2\frac{1}{8}$ _____
2. $1\frac{1}{2}$ _____
3. $3\frac{1}{3}$ _____
4. $2\frac{6}{9}$ _____
5. $1\frac{4}{10}$ _____
6. $2\frac{3}{9}$ _____
7. $3\frac{1}{12}$ _____
8. $2\frac{8}{12}$ _____
9. $4\frac{5}{11}$ _____
10. $2\frac{2}{15}$ _____
11. $3\frac{2}{12}$ _____
12. $2\frac{6}{14}$ _____

3

Convert the improper fractions to mixed numbers.

1. $\frac{23}{5}$ = _____

2. $\frac{17}{2}$ = _____

3. $\frac{14}{6}$ = _____

4. $\frac{7}{2}$ = _____

5. $\frac{11}{5}$ = _____

6. $\frac{19}{4}$ = _____

7. $\frac{8}{3}$ = _____

8. $\frac{13}{6}$ = _____

9. $\frac{6}{5}$ = _____

10. $\frac{3}{2}$ = _____

Convert the improper fractions to mixed numbers.

1. $\frac{23}{5}$ = _____

2. $\frac{17}{2}$ = _____

3. $\frac{14}{6}$ = _____

4. $\frac{7}{2}$ = _____

5. $\frac{11}{5}$ = _____

6. $\frac{19}{4}$ = _____

7. $\frac{8}{3}$ = _____

8. $\frac{13}{6}$ = _____

9. $\frac{6}{5}$ = _____

10. $\frac{3}{2}$ = _____

4

Rename the mixed numbers to mixed numbers with proper fractions. Write your answer in simplest form.

1. $3\frac{5}{4}$ _____
2. $2\frac{6}{4}$ _____
3. $1\frac{3}{2}$ _____
4. $4\frac{7}{6}$ _____
5. $2\frac{5}{2}$ _____
6. $3\frac{6}{5}$ _____
7. $5\frac{8}{6}$ _____
8. $3\frac{5}{3}$ _____
9. $1\frac{4}{3}$ _____
10. $2\frac{9}{6}$ _____
11. $3\frac{12}{10}$ _____
12. $4\frac{14}{12}$ _____

Rename the mixed numbers to mixed numbers with proper fractions. Write your answer in simplest form.

1. $3\frac{5}{4}$ _____
2. $2\frac{6}{4}$ _____
3. $1\frac{3}{2}$ _____
4. $4\frac{7}{6}$ _____
5. $2\frac{5}{2}$ _____
6. $3\frac{6}{5}$ _____
7. $5\frac{8}{6}$ _____
8. $3\frac{5}{3}$ _____
9. $1\frac{4}{3}$ _____
10. $2\frac{9}{6}$ _____
11. $3\frac{12}{10}$ _____
12. $4\frac{14}{12}$ _____

5

Determine a common denominator for the fraction pairs.

1. $\frac{3}{6}$ & $\frac{1}{3}$ _____

2. $\frac{4}{8}$ & $\frac{3}{4}$ _____

3. $\frac{2}{3}$ & $\frac{3}{4}$ _____

4. $\frac{1}{3}$ & $\frac{7}{8}$ _____

5. $\frac{3}{5}$ & $\frac{2}{8}$ _____

Determine a common denominator for the fraction pairs.

1. $\frac{3}{6}$ & $\frac{1}{3}$ _____

2. $\frac{4}{8}$ & $\frac{3}{4}$ _____

3. $\frac{2}{3}$ & $\frac{3}{4}$ _____

4. $\frac{1}{3}$ & $\frac{7}{8}$ _____

5. $\frac{3}{5}$ & $\frac{2}{8}$ _____

6

Add or subtract the fractions.
Write your answer in simplest form.

1. $\frac{8}{9} - \frac{2}{3} =$ _____

2. $\frac{1}{8} + \frac{2}{3} =$ _____

3. $\frac{3}{5} - \frac{2}{4} =$ _____

4. $\frac{1}{2} + \frac{6}{16} =$ _____

5. $\frac{3}{12} + \frac{5}{8} =$ _____

Add or subtract the fractions.
Write your answer in simplest form.

1. $\frac{8}{9} - \frac{2}{3} =$ _____

2. $\frac{1}{8} + \frac{2}{3} =$ _____

3. $\frac{3}{5} - \frac{2}{4} =$ _____

4. $\frac{1}{2} + \frac{6}{16} =$ _____

5. $\frac{3}{12} + \frac{5}{8} =$ _____

7

Solve. Show all of your work.

1. Jamison runs after school twice a week. On Mondays, he runs 2/3 of a mile. On Wednesdays, he runs 10/12 of a mile. How many miles does he run in all?

2. Brody made his specialty dessert last night. He used 1/2 cup of white sugar and 2/3 cup of brown sugar. How much more brown sugar did Brody use than white sugar?

3. Hayden and Blake both measured and cut pieces of construction paper for a school project. Hayden's piece measured 3/4 of a yard, while Blake's piece measured 4/5 of a yard. Determine the difference between the two lengths of paper.

Solve. Show all of your work.

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2. Brody made his specialty dessert last night. He used 1/2 cup of white sugar and 2/3 cup of brown sugar. How much more brown sugar did Brody use than white sugar?

3. Hayden and Blake both measured and cut pieces of construction paper for a school project. Hayden's piece measured 3/4 of a yard, while Blake's piece measured 4/5 of a yard. Determine the difference between the two lengths of paper.

8

Add or subtract the mixed numbers.
Write your answer in simplest form.

1. $2\frac{5}{6} - 2\frac{1}{2} =$ _____

2. $1\frac{4}{5} + 3\frac{2}{3} =$ _____

3. $4\frac{6}{8} - 1\frac{1}{4} =$ _____

4. $5\frac{2}{3} + 3\frac{9}{12} =$ _____

5. $3\frac{8}{14} - 2\frac{1}{2} =$ _____

Add or subtract the mixed numbers.
Write your answer in simplest form.

1. $2\frac{5}{6} - 2\frac{1}{2} =$ _____

2. $1\frac{4}{5} + 3\frac{2}{3} =$ _____

3. $4\frac{6}{8} - 1\frac{1}{4} =$ _____

4. $5\frac{2}{3} + 3\frac{9}{12} =$ _____

5. $3\frac{8}{14} - 2\frac{1}{2} =$ _____

9

Subtract the mixed numbers.
Write your answer in simplest form.

1. $3\frac{1}{4} - 2\frac{6}{8} =$ _____

2. $4\frac{1}{3} - 3\frac{5}{9} =$ _____

3. $4\frac{6}{12} - 3\frac{3}{4} =$ _____

4. $5\frac{2}{7} - 2\frac{10}{14} =$ _____

5. $3\frac{3}{11} - 1\frac{1}{2} =$ _____

Subtract the mixed numbers.
Write your answer in simplest form.

1. $3\frac{1}{4} - 2\frac{6}{8} =$ _____

2. $4\frac{1}{3} - 3\frac{5}{9} =$ _____

3. $4\frac{6}{12} - 3\frac{3}{4} =$ _____

4. $5\frac{2}{7} - 2\frac{10}{14} =$ _____

5. $3\frac{3}{11} - 1\frac{1}{2} =$ _____

10

Solve. Show all of your work.

1. Hunter had his last birthday at Jump Park. His mother paid for 2 1/2 hours of jumping on the trampolines. Hunter jumped for 1 2/3 hours before asking his mother how much longer he had to jump. How much longer does he have left to jump?

2. Two babies are born at the same hospital on the same day. One of the babies measures 18 3/4 inches. The other baby measures 19 7/8 inches. What is the difference in the measurements of the two babies?

3. Jacob watched a movie with his friends and then went out to eat afterwards. The movie lasted 2 1/8 hours. He spent another 1 1/4 hour eating and hanging out before heading home. How long did Jacob spend with his friends?

Solve. Show all of your work.

1. Hunter had his last birthday at Jump Park. His mother paid for 2 1/2 hours of jumping on the trampolines. Hunter jumped for 1 2/3 hours before asking his mother how much longer he had to jump. How much longer does he have left to jump?

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11

Solve. Write your answer in simplest form.

1. $\frac{8}{9} \times 2 =$ _____

2. $3 \times \frac{2}{3} =$ _____

3. $\frac{3}{4} \times 6 =$ _____

4. $4 \times \frac{6}{8} =$ _____

5. $\frac{10}{12} \times 2 =$ _____

6. $8 \times \frac{4}{5} =$ _____

Solve. Write your answer in simplest form.

1. $\frac{8}{9} \times 2 =$ _____

2. $3 \times \frac{2}{3} =$ _____

3. $\frac{3}{4} \times 6 =$ _____

4. $4 \times \frac{6}{8} =$ _____

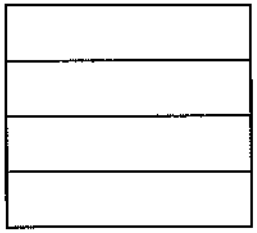
5. $\frac{10}{12} \times 2 =$ _____

6. $8 \times \frac{4}{5} =$ _____

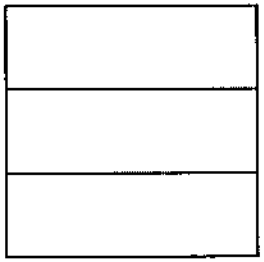
12

Solve by completing the model. The second fraction has been started for you. Write your answer in simplest form.

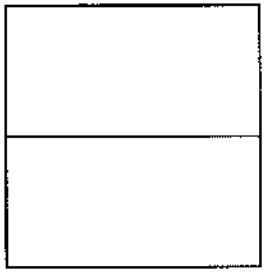
1. $\frac{1}{2} \times \frac{3}{4} =$ _____



2. $\frac{2}{4} \times \frac{1}{3} =$ _____



3. $\frac{1}{4} \times \frac{1}{2} =$ _____

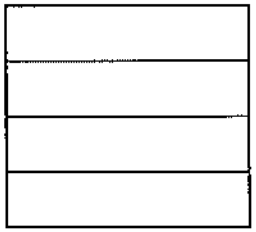


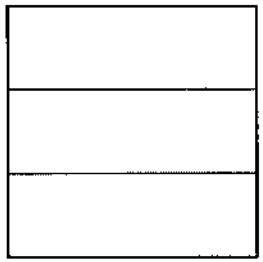
Solve by completing the model. The second fraction has been started for you. Write your answer in simplest form.

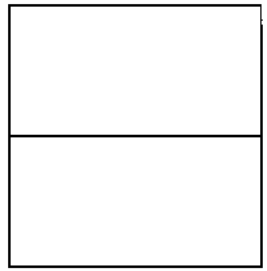
1. $\frac{1}{2} \times \frac{3}{4} =$ _____

2. $\frac{2}{4} \times \frac{1}{3} =$ _____

3. $\frac{1}{4} \times \frac{1}{2} =$ _____







13

Solve. Write your answer in simplest form.

1. $\frac{3}{4} \times \frac{2}{3} =$ _____

2. $\frac{1}{8} \times \frac{2}{3} =$ _____

3. $\frac{3}{5} \times \frac{2}{4} =$ _____

4. $\frac{1}{2} \times \frac{6}{16} =$ _____

5. $\frac{3}{4} \times \frac{6}{8} =$ _____

Solve. Write your answer in simplest form.

1. $\frac{3}{4} \times \frac{2}{3} =$ _____

2. $\frac{1}{8} \times \frac{2}{3} =$ _____

3. $\frac{3}{5} \times \frac{2}{4} =$ _____

4. $\frac{1}{2} \times \frac{6}{16} =$ _____

5. $\frac{3}{4} \times \frac{6}{8} =$ _____

14

Solve. Show all of your work.

1. Jeffery has two pets that he feeds daily. His dog eats 3/4 cup of food. His cat, on the other hand, eats 1/2 of what his dog eats. How much food does his cat eat?

2. Cameron and Seth jogged after school one day. Cameron jogged for 4/6 of an hour. Seth jogged for 1/3 the amount of time that Cameron did. How long did Seth jog?

3. Miguel's mom brought fudge for a book club luncheon. At the end of the luncheon, 1/2 pound of fudge remained. Miguel ate 1/4 of the remaining fudge after his mom returned home. How much of a pound did Miguel eat?

Solve. Show all of your work.

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2. Cameron and Seth jogged after school one day. Cameron jogged for 4/6 of an hour. Seth jogged for 1/3 the amount of time that Cameron did. How long did Seth jog?

3. Miguel's mom brought fudge for a book club luncheon. At the end of the luncheon, 1/2 pound of fudge remained. Miguel ate 1/4 of the remaining fudge after his mom returned home. How much of a pound did Miguel eat?

15

Multiply the mixed numbers.
Write your answer in simplest form.

1. $3\frac{3}{4} \times 2\frac{1}{2} =$ _____

2. $2\frac{4}{5} \times 2\frac{1}{4} =$ _____

3. $4\frac{2}{3} \times 2\frac{6}{8} =$ _____

4. $3\frac{7}{8} \times 3\frac{1}{2} =$ _____

5. $4\frac{1}{3} \times 1\frac{1}{2} =$ _____

Multiply the mixed numbers.
Write your answer in simplest form.

1. $3\frac{3}{4} \times 2\frac{1}{2} =$ _____

2. $2\frac{4}{5} \times 2\frac{1}{4} =$ _____

3. $4\frac{2}{3} \times 2\frac{6}{8} =$ _____

4. $3\frac{7}{8} \times 3\frac{1}{2} =$ _____

5. $4\frac{1}{3} \times 1\frac{1}{2} =$ _____

16

Solve. Show all of your work.

1. Mr. Taylor made his family's recipe for cornbread last night for a dinner party. The recipe required 1 1/3 cups milk. However, Mr. Taylor made 3 1/2 batches of the recipe to accommodate all of the guests. How much milk did he use?

2. Peyton is working with his son on a construction project. He is using pieces of wood that are 4 3/4 feet in size. He needs 3 1/2 more boards of that size. How many total feet of wood does he need purchase?

3. Darius mows yards on the weekends. He earns 8 1/2 dollars for each hour that he mows. If he mowed for 12 1/2 hours this past weekend, how much money did he earn?

Solve. Show all of your work.

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3. Darius mows yards on the weekends. He earns 8 1/2 dollars for each hour that he mows. If he mowed for 12 1/2 hours this past weekend, how much money did he earn?

17

Solve.

1. $\frac{1}{3} \div 2 =$ _____

2. $3 \div \frac{1}{4} =$ _____

3. $\frac{1}{6} \div 4 =$ _____

4. $5 \div \frac{1}{8} =$ _____

5. $\frac{1}{5} \div 3 =$ _____

6. $8 \div \frac{1}{2} =$ _____

Solve.

1. $\frac{1}{3} \div 2 =$ _____

2. $3 \div \frac{1}{4} =$ _____

3. $\frac{1}{6} \div 4 =$ _____

4. $5 \div \frac{1}{8} =$ _____

5. $\frac{1}{5} \div 3 =$ _____

6. $8 \div \frac{1}{2} =$ _____

18

Solve. Show all of your work.

1. A construction worker was preparing wood for a project. He had 1/4 of a meter of wood that he needed to cut into equal size pieces. If he cut the wood into 6 pieces, how long will each piece be?

2. Benjamin purchased 6 pounds of meat at a discounted price. He decided to store the meat in a freezer to lengthen the amount of time the meat would last. Before storing the meat, he divided it into bags measuring 1/3 pound each. How many bags did he use for all the meat?

3. After a dinner party, 1/5 of a casserole remained. The leftover casserole was shared equally among the three children in the family for their lunch the next day. How much of a casserole did each child get?

Solve. Show all of your work.

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19

Solve. Show all of your work.

1. Mrs. Williams made a cake for her son's birthday party. After the party, 1/4 of the cake was leftover. Mrs. Williams' husband ate 1/5 of what was leftover. What fraction of the cake did her husband eat?

2. After reading for his homework, Henry stopped to take a break and record his reading on his log. He read for 1/2 of an hour before dinner, and 5/6 of an hour after dinner. How much longer did Henry read after dinner than before dinner?

3. A baker made 1/3 pound of his specialty fudge for some his customers to sample. He separated the fudge into 18 containers. What fraction of a pound was in each container if he put an equal amount in each?

Solve. Show all of your work.

1. Mrs. Williams made a cake her son's birthday party. After the party, 1/4 of the cake was leftover. Mrs. Williams' husband ate 1/5 of what was leftover. What fraction of the cake did her husband eat?

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20