

Directions: Solve each problem.

$$\frac{3}{4} + \frac{2}{5} = 1\frac{3}{20}$$

$$\frac{7}{9} - \frac{1}{2} = \frac{5}{18}$$

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

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

$$3\frac{4}{9} - 1\frac{1}{3} =$$

$$2\frac{1}{9}$$

$$2\frac{6}{7} + 2\frac{1}{2} = 5\frac{5}{14}$$

Adding & Subtracting Fractions

CCSS: 5.NF.1

I can add and subtract fractions with unlike denominators.

Find each sum or difference.

Answer Key

1) $\frac{3}{4} + \frac{2}{5} = 1 \frac{3}{20}$

2) $\frac{1}{2} - \frac{1}{5} = \frac{3}{10}$

3) $\frac{1}{2} + \frac{4}{5} = 1 \frac{3}{10}$

4) $\frac{2}{3} - \frac{1}{4} = \frac{5}{12}$

5) $\frac{2}{3} + \frac{4}{7} = 1 \frac{5}{21}$

6) $\frac{6}{7} - \frac{1}{6} = \frac{29}{42}$

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

8) $\frac{4}{8} - \frac{2}{9} = \frac{5}{18}$

Adding & Subtracting Mixed Numbers

CCSS: 5.NF.1

I can add and subtract fractions with unlike denominators (including mixed numbers).

Find each sum or difference.

Answer Key

1) $2\frac{1}{5} + 2\frac{1}{2} = 4\frac{7}{10}$

2) $3\frac{1}{2} - 1\frac{1}{2} = 2$

3) $3\frac{1}{3} + 5\frac{5}{6} = 9\frac{1}{6}$

4) $5\frac{2}{3} - 2\frac{2}{5} = 3\frac{4}{15}$

5) $5\frac{3}{4} + 3\frac{6}{9} = 9\frac{5}{12}$

6) $3\frac{8}{10} - 2\frac{2}{3} = 1\frac{2}{15}$

7) $3\frac{2}{8} + 2\frac{1}{6} = 5\frac{5}{12}$

8) $5\frac{5}{11} - 2\frac{9}{12} = 2\frac{31}{44}$

Directions: Solve each problem.

On Saturday it snowed $\frac{1}{4}$ of an inch, and on Sunday it rained $\frac{7}{8}$ of an inch. How much did it snow altogether?

$$1\frac{1}{8}$$

Zach's bean plant was $7\frac{1}{5}$ inches tall, and his pepper plant was $5\frac{2}{3}$ inches tall. How much taller was the bean plant than the pepper plant?

$$1\frac{8}{15}$$

Justin ate $2\frac{2}{5}$ brownies, and Eric ate $1\frac{1}{4}$ brownies. How many more brownies did Justin eat than Eric?

$$1\frac{3}{20}$$

Angie drank $3\frac{1}{3}$ cups of water, and Cassie drank $4\frac{5}{6}$ cups of water. How many cups of water did Angie and Cassie drink?

$$8\frac{1}{6}$$

Tori's cookie recipe called for $1\frac{1}{3}$ cups of sugar and $2\frac{1}{2}$ cups of flour. How much sugar and flour did Tori use altogether?

$$3\frac{5}{6}$$

Adding & Subtracting Fractions Word Problems

CCSS: 5.NF.2

I can solve word problems involving addition and subtraction of fractions.

Find each sum or difference. **Answer Key**

- 1) On Monday, it rained $1 \frac{3}{4}$ of an inch, and on Tuesday it rained $2 \frac{2}{3}$ of an inch. How many inches did it rain altogether?

4 $\frac{5}{12}$ inches

- 2) Jamie did homework for $4 \frac{1}{5}$ hours last week, and Bob did homework for $2 \frac{1}{4}$ hours last week. How much longer did Jamie spend doing homework than Bob?

3 $\frac{19}{20}$ hours

- 3) Steve had $3 \frac{5}{8}$ pizzas left after his birthday party. He sent $1 \frac{1}{4}$ home with his friends. How much pizza does Steve have left to eat?

2 $\frac{3}{8}$ pizzas

- 4) Mary walked $\frac{5}{6}$ of a mile to school and then walked $\frac{1}{4}$ of a mile to her friend's house. How many miles did she walk?

1 $\frac{1}{2}$ miles

Directions: Solve each problem.

$$\frac{27}{4} = 6\frac{3}{4}$$

$$\frac{18}{5} = 3\frac{3}{5}$$

$$\frac{46}{8} = 5\frac{3}{4}$$

$$\frac{31}{2} = 15\frac{1}{2}$$

If 3 people want to share 23 strawberries equally, how many strawberries should each person get?

$$\underline{7\frac{2}{3}}$$

Between what two whole numbers does your answer lie?

7 and 8

Fractions as Division

CCSS: 5.NF.3

I can interpret a fraction as division of the numerator by the denominator.

Find each quotient.

Answer Key

1) $\frac{58}{8} = 7 \frac{1}{4}$ 2) $\frac{71}{4} = 17 \frac{3}{4}$ 3) $\frac{23}{2} = 11 \frac{1}{2}$

4) $\frac{75}{9} = 8 \frac{1}{3}$ 5) $\frac{23}{4} = 5 \frac{3}{4}$ 6) $\frac{85}{4} = 21 \frac{1}{4}$

7) $\frac{73}{9} = 8 \frac{1}{9}$ 8) $\frac{50}{2} = 25$ 9) $\frac{37}{6} = 6 \frac{1}{6}$

10) $\frac{30}{3} = 10$ 11) $\frac{23}{6} = 3 \frac{5}{6}$ 12) $\frac{71}{5} = 14 \frac{1}{5}$

13) $\frac{99}{3} = 33$ 14) $\frac{44}{4} = 11$ 15) $\frac{26}{8} = 3 \frac{1}{4}$

Fractions as Division Word Problems

CCSS: 5.NF.3

I can solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers.

Find each quotient.

Answer Key

- 1) Jenny has 82 pages left in her book. She needs to finish her book in 4 days. How many pages will she need to read per day?

20 $\frac{1}{2}$ pages

- 2) Timothy has 68 pieces of paper and he wants to split into 5 piles. How many pieces of paper will be in each pile?

13 $\frac{3}{5}$ pieces of paper

- 3) A farmer wanted to split 43 ears of corn among his 6 children. How many ears of corn will each child get?

7 $\frac{1}{6}$ ears of corn

- 4) Michelle's bucket of water weighs 99 ounces. If Michelle give the same amount to 8 pots of flowers, how many ounces of water will each pot receive?

12 $\frac{3}{8}$ ounces

Directions: Solve each problem.

$$\frac{1}{6} \times \frac{3}{4} = \frac{1}{8}$$

$$\frac{2}{5} \times \frac{3}{8} = \frac{1}{8}$$

$$\frac{2}{7} \times 5 = 1 \frac{3}{7}$$

$\frac{1}{4}$ in



$$\frac{2}{9} \text{ inches}^2$$

Find the area of the rectangle.

$\frac{5}{6}$ ft

$\frac{3}{7}$ ft



$$\frac{5}{14} \text{ feet}^2$$

Multiplying Fractions

CCSS: 5.NF.4

I can multiply a fraction by a fraction.

Multiply to find each product.

Answer Key

1) $\frac{2}{5} \times \frac{1}{5} = \frac{2}{25}$

2) $\frac{1}{3} \times \frac{2}{4} = \frac{1}{6}$

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

4) $\frac{1}{5} \times \frac{5}{7} = \frac{1}{7}$

5) $\frac{1}{5} \times \frac{1}{2} = \frac{1}{10}$

6) $\frac{3}{9} \times \frac{1}{7} = \frac{1}{21}$

7) $\frac{3}{4} \times \frac{5}{8} = \frac{15}{32}$

8) $\frac{7}{9} \times \frac{1}{9} = \frac{7}{81}$

Name: _____

Multiplying Fractions

CCSS: 5.NF.4

I can multiply a fraction by a fraction.

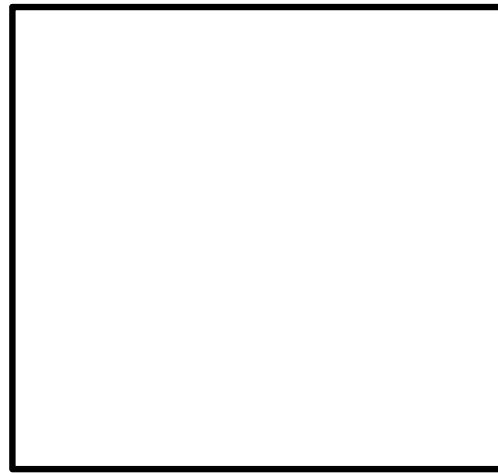
Shade the boxes to show how to visually multiply a fraction by a fraction.

Answer Key

1) $\frac{1}{2} \times \frac{4}{5} = \frac{2}{5}$



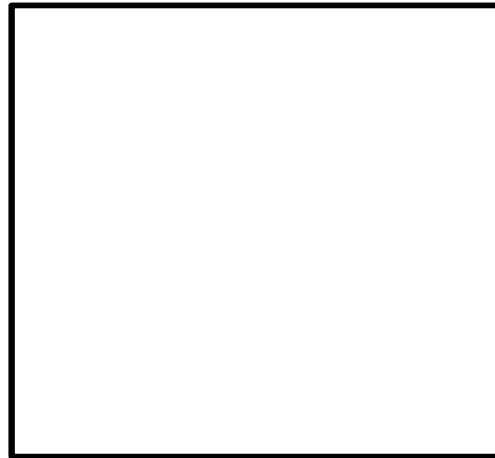
2) $\frac{3}{4} \times \frac{2}{5} = \frac{3}{10}$



3) $\frac{5}{6} \times \frac{6}{7} = \frac{5}{7}$



4) $\frac{2}{5} \times \frac{1}{6} = \frac{1}{15}$



Multiplying a Fraction by a Whole Number

CCSS: 5.NF.4

I can multiply a fraction by a whole number.

Multiply to find each product.

Answer Key

1) $\frac{2}{3} \times 2 = 1 \frac{1}{3}$

2) $\frac{1}{3} \times 4 = 1 \frac{1}{3}$

3) $\frac{2}{3} \times 2 = 1 \frac{1}{3}$

4) $\frac{1}{5} \times 4 = \frac{4}{5}$

5) $\frac{5}{9} \times 5 = 2 \frac{7}{9}$

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

7) $\frac{3}{8} \times 8 = 3$

8) $\frac{3}{6} \times 5 = 2 \frac{1}{2}$

Multiplying Mixed Numbers

CCSS: 5.NF.4

I can multiply fractions.

Find each product.

Answer Key

1) $1 \frac{1}{4} \times 2 \frac{1}{3} = 2 \frac{11}{12}$

2) $3 \frac{2}{5} \times 2 \frac{2}{4} = 8 \frac{1}{2}$

3) $2 \frac{3}{6} \times 5 \frac{1}{2} = 13 \frac{3}{4}$

4) $4 \frac{2}{7} \times 2 \frac{1}{2} = 10 \frac{5}{7}$

5) $3 \frac{1}{3} \times 5 \frac{1}{4} = 17 \frac{1}{2}$

6) $4 \frac{7}{10} \times 1 \frac{2}{3} = 7 \frac{5}{6}$

7) $2 \frac{3}{10} \times 4 \frac{6}{11} = 10 \frac{5}{11}$

8) $5 \frac{8}{9} \times 1 \frac{7}{12} = 9 \frac{35}{108}$

Directions: Solve each problem.

Without multiplying, choose which problem will have the greater product and explain.

A) $\frac{3}{5} \times \frac{1}{4} =$ B) $\frac{3}{5} \times \frac{1}{3} =$

B - Answers will vary.

Without multiplying, choose which problem will have the greater product and explain.

A) $\frac{6}{6} \times 4 =$ B) $\frac{2}{1} \times 3 =$

B - Answers will vary.

Will the product be more or less than $2 \frac{1}{7}$?

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

Less

Will the product be more or less than $3 \frac{1}{2}$?

$$3 \frac{1}{2} \times 1 \frac{4}{9} =$$

More

Will the product be more or less than $1 \frac{3}{5}$?

$$1 \frac{3}{5} \times \frac{2}{3} =$$

Less

Comparing Fraction Products

CCSS: 5.NF.5

I can compare products without multiplying

Without multiplying circle the letter that will have the greater product and explain.

Answer Key

A) $\frac{1}{2} \times 7 = 3 \frac{1}{2}$

B) $\frac{2}{4} \times 4 = 2$

A) $\frac{3}{5} \times 3 = 1 \frac{4}{5}$

B) $\frac{6}{7} \times 6 = 5 \frac{1}{7}$

A) $\frac{1}{3} \times 4 = 1 \frac{1}{3}$

B) $\frac{3}{4} \times 6 = 4 \frac{1}{2}$

Directions: Solve each problem.

Andy bought $\frac{4}{5}$ of a pound of pecans. He ate $\frac{1}{3}$ of what he purchased. What fraction of a pound of pecans did Andy eat?

$$\frac{4}{15}$$

Julie's class spent $\frac{7}{8}$ of an hour in art class. They painted for $\frac{2}{3}$ of the time. What fraction of an hour did the class paint?

$$\frac{7}{12}$$

Holly's cupcake recipe calls for $1\frac{1}{3}$ cups of sugar. Holly wants to make $\frac{1}{2}$ a batch of cupcakes. How much sugar will Holly need to make cupcakes?

$$\frac{2}{3}$$

Danny has 40 cookies. He gives away $\frac{4}{5}$ of his cookies. How many cookies does he give away?

$$32$$

Steven swam $2\frac{1}{6}$ miles and Ryan swam $\frac{3}{4}$ as far as Steven. How many miles did Ryan swim?

$$1\frac{5}{8}$$

Multiplying Fraction Word Problems

CCSS: 5.NF.6

I can solve real-world problems involving multiplication of fractions and mixed numbers.

Find each quotient.

Answer Key

- 1) $\frac{2}{3}$ of the bears at the zoo are brown. $\frac{1}{2}$ of them are male. What fraction of the zoo's bears are brown males?

 $\frac{1}{3}$

- 2) Todd walks $2\frac{1}{4}$ miles home each day. He stops to rest $\frac{1}{3}$ of the way home. How far has Todd walked when he stopped to rest?

 $\frac{3}{4}$ of a mile

- 3) Cindy's cupcake recipe calls for $\frac{3}{4}$ cup of flour. Cindy wants to make $\frac{2}{3}$ of a batch of cupcakes. How much flour will Cindy need to make the cupcakes?

 $\frac{1}{2}$ of a cup

- 4) A box of staples weighs $2\frac{4}{5}$ ounces. If Mr. Thomas has $3\frac{1}{2}$ boxes, what is their combined weight?

 $9\frac{4}{5}$ ounces

Directions: Solve each problem.

$$7 \div \frac{1}{3} =$$

21

$$\frac{1}{5} \div 6 =$$

$\frac{1}{30}$

Monica has a ribbon that is 8 feet long. She wants to use all of the ribbon to make bows. She cuts the ribbon into pieces that are $\frac{1}{4}$ of a foot. How many bows can she make?

32

Garret had $\frac{1}{2}$ of a pizza. He split the pizza into 5 equal pieces. What fraction of a pizza was each piece?

$\frac{1}{10}$

Brad has 9 cups of cherries. He divided the cherries in $\frac{1}{3}$ cup servings. How many servings does he have?

27

Name: _____

Dividing Fractions

CCSS: 5.NF.7

I can divide unit fractions by whole numbers and whole numbers by unit fractions.

Find each quotient.

Answer Key

$$1) \quad \frac{1}{3} \div 4 = \frac{1}{12}$$

$$2) \quad 9 \div \frac{1}{4} = 36$$

$$3) \quad \frac{1}{7} \div 4 = \frac{1}{28}$$

$$4) \quad 2 \div \frac{1}{4} = 8$$

$$5) \quad \frac{1}{6} \div 7 = \frac{1}{42}$$

$$6) \quad 2 \div \frac{1}{2} = 4$$

$$7) \quad \frac{1}{6} \div 6 = \frac{1}{36}$$

$$8) \quad 6 \div \frac{1}{3} = 18$$

Name: _____

Dividing Fractions

CCSS: 5.NF.7

I can divide unit fractions by whole numbers and whole numbers by unit fractions.

Find each quotient.

Answer Key

$$1) \quad \frac{2}{3} \div \frac{2}{3} = \quad 4/9$$

$$2) \quad \frac{1}{2} \div \frac{3}{5} = \quad 3/10$$

$$3) \quad \frac{5}{6} \div \frac{1}{3} = \quad 5/18$$

$$4) \quad \frac{2}{4} \div \frac{1}{3} = \quad 1/6$$

$$5) \quad \frac{1}{9} \div \frac{1}{2} = \quad 1/18$$

$$6) \quad \frac{2}{5} \div \frac{4}{6} = \quad 4/15$$

$$7) \quad \frac{5}{6} \div \frac{1}{7} = \quad 5/42$$

$$8) \quad \frac{1}{9} \div \frac{1}{3} = \quad 1/27$$