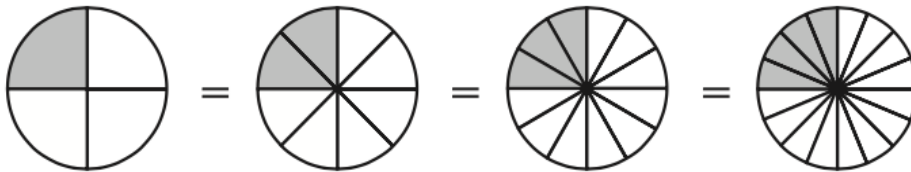


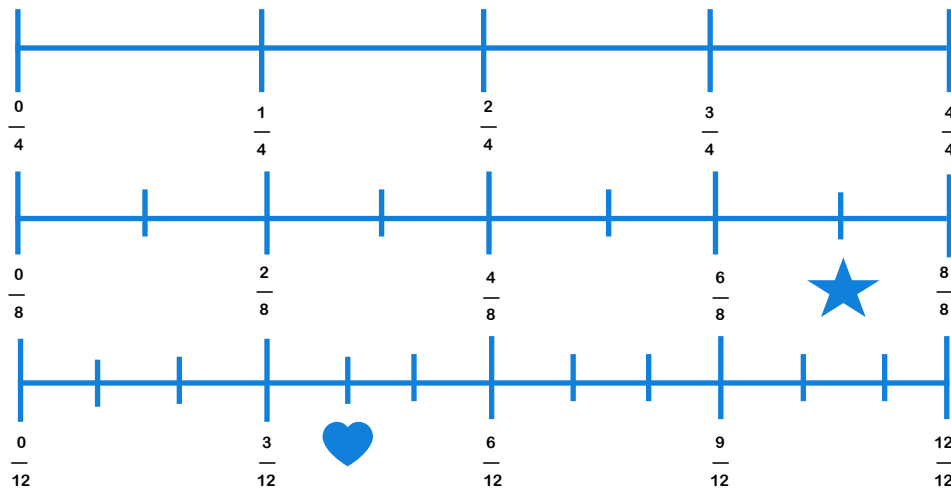
# Equivalent Fractions

1. WRITE A CHAIN OF EQUIVALENT FRACTIONS FOR THE SHADED PARTS.



\_\_\_\_\_ = \_\_\_\_\_ = \_\_\_\_\_ = \_\_\_\_\_

USE THE NUMBER LINES TO COMPLETE EXERCISES 2-7.

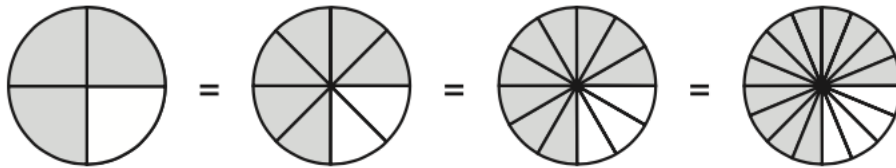


2. What fraction is marked by the star? \_\_\_\_\_
3. What fraction is marked by the heart? \_\_\_\_\_
4. If you have 2/4 cup of water, how many twelfths do you have? \_\_\_\_\_
5. If you have 9/12 of an apple, how many eighths do you have? \_\_\_\_\_
6. Which is greater, 3/8 or 5/12? \_\_\_\_\_
7. Give two equivalent fractions 4/8. \_\_\_\_\_



# Equivalent Fractions

1. WRITE A CHAIN OF EQUIVALENT FRACTIONS FOR THE SHADED PARTS.



\_\_\_\_\_ = \_\_\_\_\_ = \_\_\_\_\_ = \_\_\_\_\_

WRITE THE MULTIPLIER OR DIVISOR FOR EACH PAIR OF EQUIVALENT FRACTIONS.

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

Divisor = \_\_\_\_\_

$$\frac{2}{5} = \frac{6}{15}$$

Multiplier = \_\_\_\_\_

$$\frac{18}{24} = \frac{3}{4}$$

Divisor = \_\_\_\_\_

$$\frac{5}{9} = \frac{25}{45}$$

Multiplier = \_\_\_\_\_

$$\frac{36}{63} = \frac{4}{7}$$

Divisor = \_\_\_\_\_

$$\frac{5}{6} = \frac{30}{36}$$

Multiplier = \_\_\_\_\_

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

Divisor = \_\_\_\_\_

$$\frac{2}{5} = \frac{14}{35}$$

Multiplier = \_\_\_\_\_

$$\frac{5}{6} = \frac{20}{24}$$

Divisor = \_\_\_\_\_

$$\frac{2}{3} = \frac{12}{18}$$

Multiplier = \_\_\_\_\_

$$\frac{21}{56} = \frac{3}{8}$$

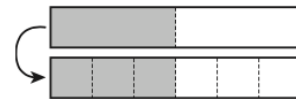
Divisor = \_\_\_\_\_



# Fractions

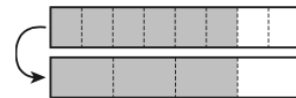
## COMPLETE EACH EXERCISE ABOUT THE PAIRS OF FRACTION BARS

1. What equivalent fractions are shown? \_\_\_\_\_



2. Identify the multiplier. \_\_\_\_\_

3. What equivalent fractions are shown? \_\_\_\_\_



4. Identify the divisor. \_\_\_\_\_

5. Write a chain with at least six equivalent fractions.

\_\_\_\_\_ = \_\_\_\_\_ = \_\_\_\_\_ = \_\_\_\_\_ = \_\_\_\_\_ = \_\_\_\_\_

## SOLVE.

1. During her first day fishing, Erika kept 5 of the 8 fish she caught. During her second day, she kept 7 of the 10 fish she caught. In which day did she keep the greater fraction of the fish she caught?

2. The Nicklaus family grows corn on 30 of their 50 acres. The Johnsons grow corn on 40 of their 70 acres. Which family uses a greater fraction of their land to grow corn?

3. Of the 5 plants on Ms. Young's windowsill, 2 are purple cone flower. Of the 8 plants on Mr. Fox's windowsill, 3 are purple cone flower. Which teacher has a greater fraction of plants that are purple cone flower?



# Adding & Subtracting Fractions

ADD OR SUBTRACT.

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

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

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

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

$$2\frac{3}{4} - \frac{1}{4} =$$

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

$$2 - \frac{1}{5} =$$

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

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

SOLVE.

1. Zoe used  $2\frac{2}{3}$  cups cold water and  $1\frac{2}{3}$  of warm water to water her plants. How much water did she use in all?

---

2. Isabella made  $5\frac{3}{8}$  gallons of lemonade for a potluck at Picnic Point. Her friends drank  $3\frac{5}{8}$  gallons. How much lemonade was left after the potluck?

---

3. Theo bought a sub sandwich 12 inches long from the Memorial Union. He cut off a piece  $2\frac{3}{4}$  inches long and gave it to his sister. How long is Theo's sandwich now?

---



# Adding & Subtracting Fractions

## ADD OR SUBTRACT.

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

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

$$3\frac{3}{10} + 4\frac{3}{5} =$$

$$4\frac{7}{12} - 2\frac{1}{3} =$$

$$9\frac{5}{6} - 1\frac{2}{9} =$$

$$3\frac{1}{5} + 3\frac{5}{8} =$$

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

$$9\frac{11}{12} - 2\frac{3}{4} =$$

$$5\frac{11}{15} - 1\frac{2}{5} =$$

## SOLVE.

1. When Billie the Bluegill was 3 months old, they weighed  $13\frac{1}{4}$  ounces. At 6 months, they weighed  $17\frac{1}{8}$  ounces. How much weight did Billie gain?

---

2. Jeff ran  $3\frac{7}{10}$  miles on Saturday around lake Wingra and  $4\frac{4}{5}$  miles on Sunday around lake Monona. How many miles did he run on both days combined?

---

3. At the Memorial Union, Stella spent  $1\frac{3}{4}$  hours serving ice cream and  $1\frac{1}{2}$  hours helping Hoofers. She is supposed to work 4 hours. How much longer does she need to work?

---



# Adding & Subtracting Fractions

ADD OR SUBTRACT.

$$5 - 1\frac{3}{7} =$$

$$1\frac{5}{6} - 1\frac{1}{12} =$$

$$6\frac{5}{8} - 4\frac{1}{12} =$$

$$2\frac{4}{5} + \frac{8}{9} =$$

$$8\frac{1}{6} - 4\frac{1}{5} =$$

$$17\frac{10}{100} + 2\frac{83}{100} =$$

$$\frac{13}{15} + \frac{3}{4} =$$

$$5\frac{1}{5} - 3\frac{9}{20} =$$

$$5\frac{6}{7} - 7\frac{5}{6} =$$

SOLVE.

**10.** A batch of Eli's trail mix to hike around Governor Nelson State Park has  $3\frac{1}{3}$  cups of peanuts,  $2\frac{1}{2}$  cups of almonds,  $1\frac{3}{4}$  cups of dried cherries, and  $\frac{2}{3}$  cup of coconut flakes. How many cups of trail mix are in a batch?

---

**11.** Refer to Problem 10. How much more peanuts are in the mix than almonds?

---

**12.** Eli (from Problem 10) decided to decrease the amount of peanuts by  $\frac{2}{3}$  cup. After this adjustment will there be more or less peanuts than almonds? How much more or less?

---



# Fractions & Decimals

## SOLVE.

The Monona Terrace has 1,000 lightbulbs, and 8 of the lightbulbs need to be replaced. What decimal represents the number of lightbulbs that need to be replaced?

Luisa made 10 fishing lures. She gave 2 of them to her friends. What decimal represents the number of fishing lures Luisa kept?

Mr. Ruiz has finished six tenths of his water monitoring tests. Write a fraction and a decimal that represent the amount of the tests he has finished?

Of the 1,000 fans at Camp Randall stadium, 896 are rooting for the Badgers. What decimal number do the Badger fans represent?

Marcel has an album that holds 100 pictures. He has 64 pictures of local birds in the album. Write a fraction and a decimal that represent the amount of the album that is filled?

At the Zoo, 57 of 100 animal meals have been eaten. What decimal number represents the number of animal meals that have been eaten?



# Decimals

WRITE A DECIMAL NUMBER FOR EACH WORD NAME.

1. six thousand, three hundred fifteen and two tenths

---

2. twenty-five thousand, three hundred and twelve hundredths

---

3. nine tenths

---

4. four thousandths

---

5. nine hundredths

---

WRITE EACH AMOUNT AS A DECIMAL NUMBER.

$$\frac{364}{1,000} \quad \underline{\hspace{2cm}}$$

$$\frac{39}{100} \quad \underline{\hspace{2cm}}$$

$$6\frac{3}{10} \quad \underline{\hspace{2cm}}$$

$$23\frac{73}{1,000} \quad \underline{\hspace{2cm}}$$

$$5\frac{456}{1,000} \quad \underline{\hspace{2cm}}$$

$$1\frac{6}{100} \quad \underline{\hspace{2cm}}$$

$$19\frac{17}{1,000} \quad \underline{\hspace{2cm}}$$

$$9\frac{18}{100} \quad \underline{\hspace{2cm}}$$

$$3\frac{7}{1,000} \quad \underline{\hspace{2cm}}$$

$$54\frac{9}{10} \quad \underline{\hspace{2cm}}$$

$$\frac{83}{1,000} \quad \underline{\hspace{2cm}}$$

$$45\frac{9}{1,000} \quad \underline{\hspace{2cm}}$$

$$7\frac{12}{1,000} \quad \underline{\hspace{2cm}}$$

$$\frac{11}{100} \quad \underline{\hspace{2cm}}$$

$$\frac{205}{1,000} \quad \underline{\hspace{2cm}}$$





# Adding & Subtracting Decimals

The chart shows the time each member of a relay team ran during a race. Use the data to answer each question.

1. For how much longer did Kate run than Susie?

\_\_\_\_\_

2. How much time did it take Margaret and Carlee to complete their two legs of the race combined?

\_\_\_\_\_

Susie	41.68 sec
Margaret	41.7 sec
Carlee	41.76 sec
Kate	41.71 sec

3. Which two runners had the greatest difference in their running times? What is the difference?

\_\_\_\_\_

**COPY EACH EXERCISE. THEN ADD OR SUBTRACT.**

4.  $0.7 + 0.04 =$  \_\_\_\_\_

5.  $0.32 + 0.54 =$  \_\_\_\_\_

6.  $0.45 + 0.83 =$  \_\_\_\_\_

7.  $1.5 - 0.9 =$  \_\_\_\_\_

8.  $4 - 1.6 =$  \_\_\_\_\_

9.  $4.8 - 1.35 =$  \_\_\_\_\_

10.  $0.05 + 0.3 =$  \_\_\_\_\_

11.  $0.55 + 0.39 =$  \_\_\_\_\_

12.  $16 + 5.09 =$  \_\_\_\_\_

13.  $5 - 0.02 =$  \_\_\_\_\_

14.  $3.06 - 0.5 =$  \_\_\_\_\_

15.  $9.09 - 6 =$  \_\_\_\_\_



# Adding & Subtracting Decimals

USE THE NUMBER 635,208.47 FOR EACH EXERCISE.

1. Increase the number by 0.05 \_\_\_\_\_
2. Decrease the number by 200,000 \_\_\_\_\_
3. Add 9 in the tens place. \_\_\_\_\_
4. Subtract 3 from the tenths place. \_\_\_\_\_

COPY EACH EXERCISE. THEN ADD.

- |   |  |
|---|--|
| 5. $\$29 + 33\text{¢} =$ _____          | 6. $\$59.08 + 15\text{¢} =$ _____          |
| 7. $\$74 + \$2.28 =$ _____              | 8. $4\text{ m} + 0.08\text{ m} =$ _____    |
| 9. $6\text{ m} + 0.01\text{ m} =$ _____ | 10. $163 + 0.95 =$ _____                   |
| 11. $35.06 + 0.88 =$ _____              | 12. $3.3\text{ m} + 0.06\text{ m} =$ _____ |

SOLVE.

14. Darnell is making two costumes for a play. He needs 2.33 meters of fabric for a fish costume and 4.75 meters for a cow costume. How much fabric does he need in all?

---

15. Mason is buying cross country skis that costs \$64.98. The sales tax that will be added to the cost of the skis is \$4.55. What is the total cost of the skis including sales tax?

---



# Adding & Subtracting Decimals

**COPY EACH EXERCISE. THEN SUBTRACT.**

1.  $4,000 - 517 =$  \_\_\_\_\_

2.  $8,054 - 826 =$  \_\_\_\_\_

3.  $40,753 - 2,246 =$  \_\_\_\_\_

4.  $650.38 - 173.2 =$  \_\_\_\_\_

5.  $24,370 - 6.45 =$  \_\_\_\_\_

6.  $420.3 - 153.28 =$  \_\_\_\_\_

**SOLVE.**

7. Holly caught a fish that was 6.12 meters long. Its tail was 0.8 meters. How long was the fish without its tail?

8. An angler is catching and measuring different lake fish. The shortest they find is 0.08 feet long. The largest was 12.6 feet long. What is the difference in length between these two fish?

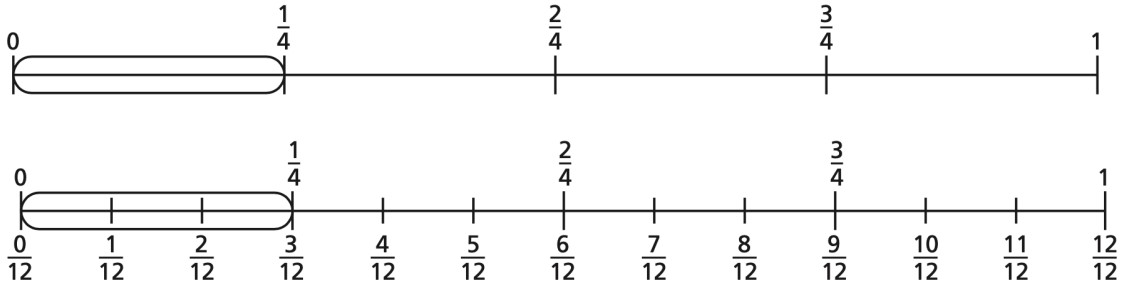
9. Ian earns \$3,140.92 each month. He spends \$890 on water barrels for his community. How much money does he have left after he buys the water barrels?

10. In the 2018 Big Ten Championship, Michigan's varsity 8 rowed 100 meters in 9.92 seconds. In the 2019 Big Tens, Wisconsin's varsity 8 rowed the same distance in 9.63 seconds. How much faster was Wisconsin's time than Michigan's?



# Multiplying Fractions

JULIE IS USING A NUMBER LINE TO FIND  $\frac{2}{3} * \frac{1}{4}$ . THIS IS HER WORK SO FAR:



1. Explain Julie's work so far to someone at home.
2. Finish Julie's work by circling  $\frac{2}{3}$  of each circled fourth.

How many twelfths did you circle altogether? \_\_\_\_\_

3. What is  $\frac{2}{3} * \frac{1}{4}$ ? \_\_\_\_\_

## SOLVE.

A family returned  $\frac{5}{6}$  of the Madison Public library books they had checked out. They read a third of only what they returned. What fraction of the books did they read?

\_\_\_\_\_

Madison Public library just purchased some new books. Non-fiction books accounted for  $\frac{3}{5}$  of the books purchased.  $\frac{2}{9}$  of the purchased non-fiction books were about world cultures. What fraction of the purchased books were about world cultures?

\_\_\_\_\_

## MULTIPLY. YOU DO NOT NEED TO SIMPLIFY.

$$\frac{3}{5} * \frac{1}{4} =$$

$$\frac{2}{3} * \frac{2}{3} =$$

$$\frac{6}{7} * \frac{1}{5} =$$



# Dividing Fractions

## DIVIDE.

1.  $7 \div 9 =$  \_\_\_\_\_

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

3.  $45 \div 20 =$  \_\_\_\_\_

4.  $2 \div 5 =$  \_\_\_\_\_

5.  $4 \div \frac{1}{20} =$  \_\_\_\_\_

6.  $1 \div 50 =$  \_\_\_\_\_

## SOLVE.

Greta has 7 cups of salad. She is holding a birthday party for Billie the Blue gill with 10 people. How many cups of salad can each person have if they share it equally?

---

Greta also has 16 ounces of cake. Only 7 people will be eating cake. How many ounces of cake can each person have if they share it equally?

---

She wants to put up 30 yards of streamers. Each streamer is  $\frac{1}{2}$  yard long. How many streamers will it take her to reach 30 yards?

---

Greta has  $\frac{1}{4}$  of a gallon of juice. It was shared equally by 3 friends. How many gallons of juice will each person get?

---



# Multiplying Decimals

**SOLVE.**

1.  $0.5 \times 0.4 =$  \_\_\_\_\_

2.  $0.2 \times 0.08 =$  \_\_\_\_\_

3.  $9 \times 0.09 =$  \_\_\_\_\_

4.  $0.05 \times 0.08 =$  \_\_\_\_\_

5.  $0.04 \times 0.5 \text{ m} =$  \_\_\_\_\_

6.  $0.03 \times 0.9 =$  \_\_\_\_\_

7.  $1.8 \times 7 =$  \_\_\_\_\_

8.  $0.24 \times 20 =$  \_\_\_\_\_

9.  $0.18 \times 0.3 =$  \_\_\_\_\_

10.  $0.28 \times 0.3 =$  \_\_\_\_\_

11. For every minute that a boat is out past rental, the boat rental company charges \$0.15. Bella returned a boat 29 minutes late. How much was her total late fee?

12. Jessica has 9.7 meters of rope. She is cutting it into 100 equal pieces. That is the same as multiplying 9.7 by 0.01. How long will each piece of rope be?

13. Each lap around the UW track in lane 1 is 0.25 mile. Delvin ran 10 laps in lane 1. How many miles did he run?



# Dividing Decimals

## SOLVE.

1. Tyra has 6 hours to rake her backyard. She plans to stop every 0.25 hour for water as she works. How many times will she stop for water during raking her back yard?

---

2. A fishing hook is 0.9 foot long, and a fish is 16.2 feet long. How many times as long as the fish hook is the fish?

---

3. A centimeter is 0.01 meter. If a boat is 8 meters wide, how many centimeters wide is it?

---

4. A milliliter is 0.001 liter. How many milliliters are there in 5 liters?

---

5. Charlie is buying fishing hooks at \$0.65 each. She spent \$12.35 on the hooks. How many did she buy?

---

## SOLVE.

6.  $0.2 \overline{)2.4}$

7.  $0.06 \overline{)30}$

8.  $0.4 \overline{)360}$

9.  $0.7 \overline{)378}$

10.  $0.13 \overline{)533}$

11.  $0.7 \overline{)378}$

