5th Grade Math

Week of March 15 - March 19, 2021



Name ____

^{*} Please do not complete until advised by teacher*







Additional Practice 8-9 Make Sense and Persevere

Make sense of the problem and then plan how to solve it.

Another Look!

Last weekend Troy spent $\frac{3}{4}$ hour doing math problems. He took 3 times as long to finish his science project. Then he spent $1\frac{1}{4}$ hours writing an essay. How much time did Troy spend on these assignments?

Tell how you can make sense of the problem.

I know that Troy spent $\frac{3}{4}$ hour doing math problems and 3 times as long on his science project.

He spent $1\frac{1}{4}$ hours writing an essay.

Tell how you can persevere in solving the problem.

I need to determine how much time Troy spent on the assignments.

First, you need to find the amount of time Troy spent on his science project.

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

Then add to calculate the total time.

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

Troy spent $4\frac{1}{4}$ hours on the assignments.

Make Sense and Persevere

Debra's rectangular vegetable garden measures $9\frac{1}{3}$ yards by 12 yards. A bottle of garden fertilizer costs \$14.79. If Debra needs to mix $\frac{1}{8}$ cup of fertilizer with water for each square yard of her garden, how many cups of fertilizer does she need?

- 1. How can you make sense of the problem?
- 2. Is there any information that is not needed to solve the problem?

Remember to check that your work makes sense.

3. How can you persevere in solving this problem? What is the answer?

A rectangular dog park was built with the dimensions shown. The fencing that completely surrounds the park cost \$12 a yard. Each square yard of grass sod that covers the entire park cost \$8. What was the total cost for the fencing and the sod?

Plan

Solve

Check

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Children's Costumes

Mrs. Lin is sewing costumes for her grandchildren. She is making three lion costumes, one zebra costume, and two bear costumes. Fabric costs \$7.49 per yard. How much fabric does Mrs. Lin need?

4.	Make Sense and Persevere What do you know? Wha	t
	are you asked to find? Is there any information you do	
	not need?	

Childi	ren's Co	stumes	
Costum	e : Fo	abric (ye	ards)
Bear		2 <u>1</u>	
DCG1	•	4	
Lion	# #	$1\frac{2}{3}$	
		-5	
Zebra	9	2 5	

5.	Make Sense and Persevere What do you need to find
	before you can answer the final question?

6.	Model with Math	Write equations to represent the
	information you de	escribed in Exercise 5.

7. Make Sense and Persevere Solve the problem.

8. Construct Arguments Explain why your answer makes sense.



Remember that good problem solvers keep asking themselves if their work makes sense.



Multiply. Rewrite as a mixed number or in simplest form if needed.

1.
$$3 \times \frac{9}{10}$$

2.
$$\frac{3}{4}$$
 of 16

3.
$$\frac{2}{3} \times \frac{3}{8}$$

4.
$$\frac{4}{5}$$
 of $\frac{3}{8}$

Multiply. Rewrite as a mixed number or in simplest form if needed.

1. $4\frac{1}{2} \times 6\frac{2}{3}$

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

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

Solve. This is a 2 step problem.

4. John has $1\frac{1}{2}$ hours of homework each day from Monday through Thursday and $2\frac{3}{4}$ hours over the weekend. How much homework does John have in a week?

Topic 8 Assessment

1. Marcy is making cookies. For each batch of dough, she needs $\frac{2}{3}$ cup of sugar. How much sugar will she use if she makes 6 batches of cookies?

2. Find the product: $48 \times \frac{3}{8}$.

3. Louise is walking 12 miles to raise funds for a local cause. If she has completed $\frac{3}{4}$ of the distance, how many miles has she walked?

4. Which is the product of $\frac{7}{9}$ and 6?

5. Find the product: $\frac{3}{8} \times \frac{5}{6}$.

6. Russ walks $\frac{7}{10}$ mile to school.

How far has he walked when he has covered $\frac{5}{8}$ of the distance to school?

7. Find the product: $1\frac{1}{4} \times 5 \frac{3}{5}$.

8. Find the product: $2\frac{2}{3} \times 3$

2 points

9. On the track and field team, $\frac{1}{4}$ of the members do the hurdles. Of the members who do the hurdles, $\frac{4}{5}$ also do the long jump.

If there are 40 members on the track team, how many do both the hurdles and the long jump?

3 points

10. Maria makes a fruit salad. The table shows the amounts of different kinds of fruit that she uses.

Kind of Fruit	Amount
Grapes	$3\frac{2}{3}$ cups
Melon	$2rac{1}{4}$ cups
Pineapple	$2rac{3}{4}$ cups
Strawberries	?

The amount of strawberries that Maria uses is $\frac{3}{8}$ times the amount of the other fruits combined.

How many cups of strawberries does Maria use?

Enrichment

- Joel has a goal to practice his clarinet for $4\frac{1}{2}$ hours per week. The list below shows the number of hours Joel has practiced so far this week.
 - Monday: $1\frac{1}{2}$ hours
 - $\bullet \ \ \text{Wednesday:} \ 1\frac{1}{4} \ \text{hours}$
 - Thursday: 1 hour

How many more hours does Joel need to practice this week to meet his goal?

Show your work.

(2018)

41

Mark and his friends order two pizzas of the same size.

- The first pizza is cut into 6 slices of equal size.
- The second pizza is cut into 4 slices of equal size.

Each person plans to take 2 slices of pizza. Mark concludes that he would get more pizza by taking 1 slice from each pizza, instead of 2 slices from the first pizza. Explain why Mark is correct. Be sure to include a number comparison using > or < in your explanation.

Answer			
		 	741.W
	•		

(2017)

Rodney bought a 25-pound bag of dog food. His dog ate $10\frac{2}{5}$ pounds of the food in the first month and $10\frac{4}{5}$ pounds of the food in the second month. How much dog food, in pounds, was remaining in the bag at the end of the two months?

Show your work.

Answer _____ pounds

49 Jessie set up a lemonade stand for three days.

- On Saturday, she sold $10\frac{2}{3}$ gallons of lemonade.
- On Sunday, she sold $3\frac{1}{3}$ gallons more than she sold on Saturday.
- On Monday, she sold $2\frac{2}{3}$ gallons less than she sold on Sunday.

How many gallons of lemonade did Jessie sell on Monday?

Answer	gallon
MIDWEI	Ganons

The table below shows part of the operating budget of a small dairy farm for last year.

The only expense not listed in the table is maintenance.

LAST YEAR'S OPERATING BUDGET

Expense	Fraction of Budget
Food	1 3
Housing	1 3
Medical Care	1/4

This year, the managers of the farm will change the fraction of the budget for housing to $\frac{1}{8}$ but will leave the fraction of the budget for food and medical care the same. Again, the remaining portion of the budget will be for maintenance expenses. What is the difference between the fraction of the budget for maintenance this year and last year?

Answer		

(2016)

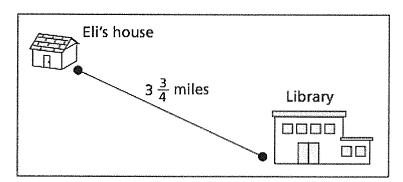
- 52 Andy has a collection of movie DVDs. In Andy's collection,
 - * $\frac{3}{5}$ of the DVDs are "Action," and
 - * $\frac{1}{4}$ of the DVDs are "Comedy."

	$\frac{4}{9}$ of his collection is "Action" or "Comedy." Cynthia said that Andy Explain whether Andy is correct or incorrect and why.
What fraction o	of the DVDs in Andy's collection is not "Action" or "Comedy?"

Answer _____

(2015)

55 Eli lives $3\frac{3}{4}$ miles from the library.



He decided to bike from his home to the library to return some books. Eli biked $1\frac{1}{10}$ miles when he remembered that he had left a book at home, so he biked back home to get it. After getting the book from home, he biked to the library. What was the total distance, in miles, Eli had biked when he finally reached the library?

Anewor	mile

Hank and Debra each own two milking cows. One day, they milked their cows and compared the amount of milk the cows produced in that one day.

COW MILK PRODUCED

**	Туре с	of Cow
engratures entered	Jersey	Holstein
Hank's Cows (gallons of milk)	4 3/4	4 1/8
Debra's Cows (gallons of milk)	5 <u>1</u>	5 <u>2</u> 3

How many more gallons of milk did Debra's two cows produce on that day compared to Hank's two cows?

Answer	oallons
ciliantei.	Valions

(2014)

Brittany needs a total of $12\frac{3}{4}$ yards of yarn for an art project. She needs $1\frac{3}{8}$ yards of blue yarn and $5\frac{1}{2}$ yards of green yarn. The rest of the yarn she needs is red. How much red yarn does Brittany need?

Answer		vard	ds
- MILLIANI CI	-	y can c	4 -

Ann and Margie had a total of 3 gallons of paint to share for a project. They had 1 gallon each of red paint, blue paint, and yellow paint.

- To complete the project, Ann used $\frac{3}{8}$ of the red paint, $\frac{1}{4}$ of the blue paint, and $\frac{1}{2}$ of the yellow paint.
- To complete the project, Margie used $\frac{1}{2}$ of the red paint, $\frac{5}{8}$ of the blue paint, and $\frac{1}{8}$ of the yellow paint.

How many total gallons of each color of paint were left after both girls had finished the project?

Show your work.

Answer	Red:	gallons	Blue: galle	lons	Yellow:	gallons

Using the leftover paint, Ann and Margie decide to make green paint. They mix the yellow and blue paint together to make the green paint. How many gallons of green paint can they make?

Answer _____ gallons

(2013)

Sophia asked the students in her class to name their favorite sport. She made this list to display the results.

- $\frac{1}{3}$ of the students named basketball
- $\frac{1}{8}$ of the students named soccer
- $\frac{5}{12}$ of the students named football
- The rest of the students in the class named baseball.

What fraction of the students in the class named baseball as their favorite sport?

Answer

- $\frac{1}{3}$ pound of nuts
- $\frac{2}{5}$ pound of raisins

How much cereal, in pounds, does Carlos use?

- A $\frac{3}{8}$
- $\mathbf{B} = \frac{5}{8}$
- C $\frac{4}{15}$
- D $\frac{11}{15}$

(2017)

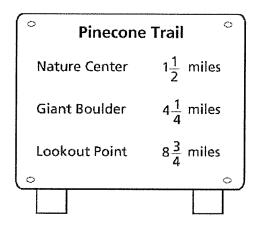
21 Each student in a class plays one of three sports: soccer, volleyball, or basketball.

- $\frac{3}{5}$ of the number of students play soccer
- $\frac{1}{4}$ of the number of students play volleyball

What fraction of the number of students play basketball?

- $A \quad \frac{3}{20}$
- $\mathbf{B} \quad \frac{4}{9}$
- $C = \frac{5}{9}$
- $D = \frac{17}{20}$

The sign below is located at the start of Pinecone Trail and shows the distances from the sign to different points of interest along the trail.



- Sage hiked from the start of the trail to Lookout Point. She then hiked back to Giant Boulder to camp for the night. What was the total distance, in miles, that Sage hiked?
- A $21\frac{3}{4}$
- B $13\frac{1}{4}$
- $C 4\frac{1}{2}$
- D $4\frac{1}{4}$

- $\frac{3}{4}$ of the class voted for the museum
- $\frac{1}{8}$ of the class voted for the zoo

The rest of the class voted for the nature park.

What fraction of the class voted for the nature park?

- $A \frac{1}{8}$
- $B = \frac{1}{2}$
- $C \frac{5}{8}$
- $D \frac{7}{8}$

(2015)

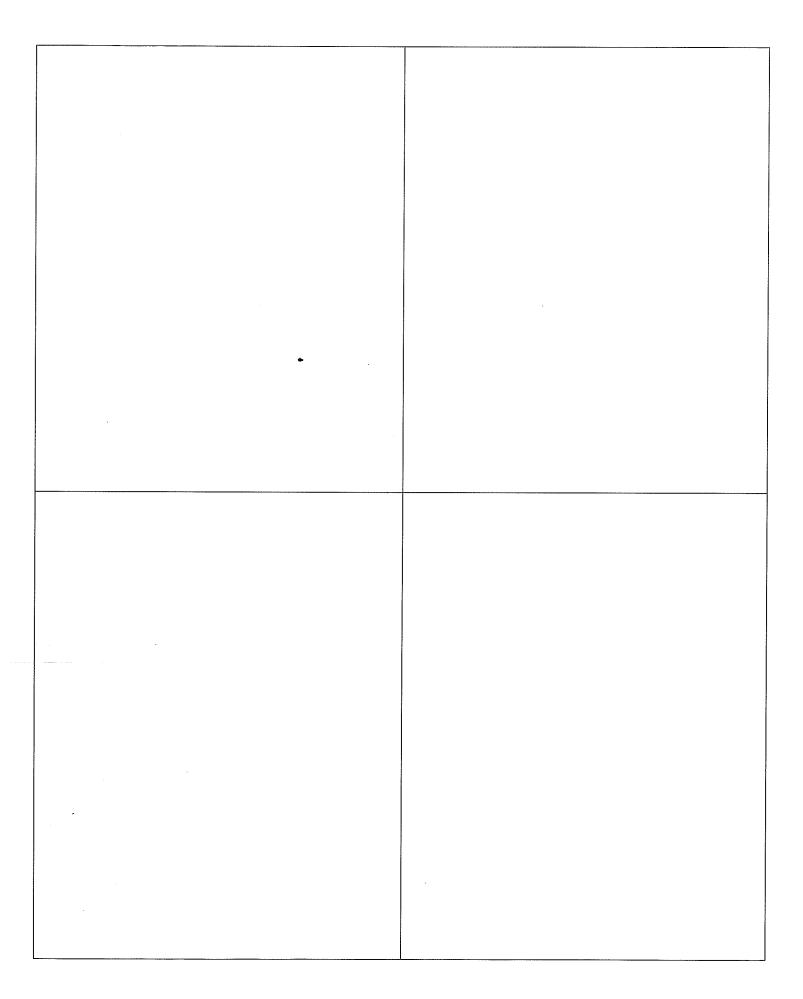
In a shipment of new books for a library, $\frac{5}{12}$ of the books were poetry and $\frac{2}{5}$ were biographies. The remainder of the books in the shipment were mysteries. What fraction of the books in the shipment were mysteries?

- $A = \frac{2}{12}$
- **B** $\frac{11}{60}$
- $c = \frac{7}{17}$
- **D** $\frac{49}{60}$

(2013)

Mr. Morris built a fence to enclose his yard. He put up $\frac{3}{4}$ of the fence on Monday. On Tuesday, he put up $\frac{1}{6}$ of the fence, and on Wednesday, he put up the rest of the fence. What portion of the fence did he put up on Wednesday?

- A $\frac{11}{12}$
- $\mathbf{B} = \frac{3}{5}$
- $C = \frac{2}{5}$
- **D** $\frac{1}{12}$



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Enrichment

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Enrichment

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