5th Grade Math

Week of May 31 - June 4, 2021

Name _____

* Please do not complete until advised by teacher*

1. Jeff and Sara both joined sports clubs at the same time. Jeff's club charges $50 to join, plus dues of $25 per month. Sara's club charges $75 to join, plus dues of $25 per month. Which statement is true?

Ⓐ Jeff will always have spent $25 more than Sara.

Ⓑ After 1 year, Jeff and Sara will have spent the same amount.

Ⓒ Sara will always have spent $1\frac{1}{2}$ times as much as Jeff.

Ⓓ Sara will always have spent $25 more than Jeff.

2. A cardboard carton has the shape of a rectangular prism. The carton has length 18 inches, width 14 inches, and height 10 inches. Which of the following expressions could **NOT** be used to find the volume of the carton?

Ⓐ $14 \times (10 \times 18)$

Ⓑ $(2 \times 18) + (2 \times 14) + 10$

Ⓒ 140×18

Ⓓ $(18 \times 14) \times 10$

3. Which quotient can be found with this model?

Ⓐ $3 \div 4$

Ⓒ $4 \div \frac{1}{3}$

Ⓑ $4 \div 3$
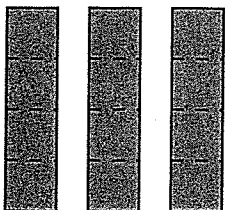
Ⓓ $3 \div \frac{1}{4}$

Olivia is making a table to compare quarts, cups, and fluid ounces.

4. Use the rule "add 4" to complete the column for the number of cups. Then use the rule "add 32" to complete the column for the number of fluid ounces.

Quarts	Cups	Fluid Ounces
1		
2		
3		
4		
5		
6		

5. Olivia made a pot of 9 quarts of soup. How many cups of soup are in the pot? How many fluid ounces are in the pot?

_____

6. Evaluate.

$15 + 28 - [(2.8 \times 5) \div 7]$

_____

7. Mona pays $1.00 for the first phone call of the day on her mobile phone, plus $0.15 per minute of the call. She paid $2.95 for her first call today. Write an expression that you could use to calculate the length, in minutes, of the phone call.

_____

Practice Video Tools Games

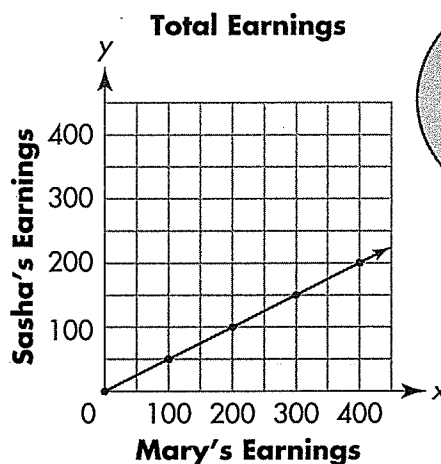## Additional Practice 15-3
Analyze and Graph Relationships

Another Look!

Mary and Sasha kept track of the money they earned at their jobs each week. They used the rules "add 100" and "add 50" to complete the table. Then they graphed ordered pairs of the total amounts they have earned after each week.

Total Amount Earned ($)		
Week	Mary	Sasha
1	100	50
2	200	100
3	300	150
4	400	200

Mary earned $400 after 4 weeks.
Sasha earned $200 after 4 weeks.
Mary earned twice as much as Sasha.

Total Earnings

Sasha's Earnings (y-axis): 100, 200, 300, 400
Mary's Earnings (x-axis): 0, 100, 200, 300, 400

You can make ordered pairs from the amounts Mary and Sasha have earned.

In **1–4**, use the rules "add 6" and "add 12" to help you.

Exit Ticket 1–4

1. Every hour at his bakery, Dennis makes 6 everything bagels and 12 blueberry bagels. Complete the table to show how many of each bagel he makes in all after each hour.

Total Bagels Made		
Hour	Everything	Blueberry
1		
2		
3		
4		

2. What ordered pair would represent the total number of each type of bagel Dennis makes in 8 hours?

3. What relationship do you notice between the total number of everything bagels and the total number of blueberry bagels made after each hour?

4. Graph the ordered pairs of the total number of each type of bagel made after each hour.

5. Thurston and Kim kept track of how many songs they downloaded each week for a month. Thurston downloaded 5 songs each week. Kim downloaded 15 songs each week. Complete the table to show the total number of songs each has downloaded after each week.

Total Number of Songs Downloaded		
Week	Thurston	Kim
1		
2		
3		
4		

6. Thurston and Kim continue downloading songs in this manner for 8 weeks. What ordered pair would represent the total number of songs they have each downloaded?

7. Graph the ordered pairs of the total number of songs each has downloaded after each week.

8. Model with Math Diego makes a rectangular prism that is 2 cubes long, 2 cubes wide, and 2 cubes tall. Each dimension of June's rectangular prism is twice as many cubes as Diego's prism. What is the volume of June's prism? Use an equation to show your work.

9. Higher Order Thinking There are 347 students going on a field trip. Each bus holds 44 students. If the school pays $95 per bus, will they need to spend more than $1,000 for the buses? How can you decide without using division?

Assessment Practice

10. Claire makes bracelets using blue and red beads. Each bracelet has 20 red beads and 5 blue beads. Write an ordered pair to represent the number of red beads and blue beads Claire will use to make 8 bracelets.

11. What relationship do you notice between the number of red beads and blue beads Claire uses to make all the bracelets?

Name _____

1. Seth hiked 3.5 miles each hour, while David hiked 2.5 miles each hour. Ordered pairs were graphed of the total distance each boy hiked. The *x*-coordinate represents the total distance, in miles, Seth hiked, and the *y*-coordinate represents the total distance, in miles, David hiked. Select all of the ordered pairs that represent this relationship.

☐ (7, 5)   ☐ (14, 20)

☐ (10, 14)   ☐ (0, 0)

☐ (21, 15)

2. Brian draws a triangle. What are the coordinates of the triangle's vertices?
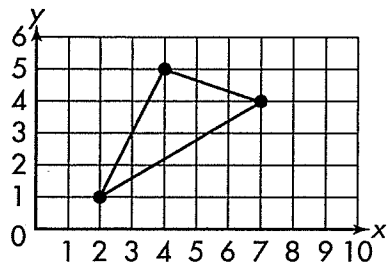
Ⓐ (1, 2); (5, 4); (4, 7)

Ⓑ (1, 1); (5, 5); (4, 4)

Ⓒ (2, 1); (4, 5); (7, 4)

Ⓓ (2, 2); (2, 4); (3, 1)

3. A textbook cover measures $\frac{5}{6}$ foot by $\frac{2}{3}$ foot. What is the area of the book cover?

Ⓐ $\frac{1}{6}$ square foot

Ⓑ $\frac{5}{9}$ square foot

Ⓒ $1\frac{1}{4}$ square feet

Ⓓ $1\frac{1}{2}$ square feet

4. Write the power of 10 to multiply the dividend and divisor by to make it a whole number. Then, write the equivalent problem and find the quotient.

$16.65 \div 0.37$

_____

Marissa works in a bread shop. Every hour, she makes 5 loaves of bread and 3 dozen cinnamon rolls.

5. Complete the table.

Hours	Loaves of Bread	Dozens of Rolls
1		
2		
3		
4		
5		
6		

6. Describe the relationship between the dozens of cinnamon rolls and the number of loaves of bread that Marissa makes in the same number of hours.

_____

_____

_____

_____

Practice Video Tools Games

Another Look!

Simon has 28 baseball cards and 16 soccer cards. Each month he plans to get 6 more baseball cards and 4 more soccer cards. Will he ever have the same number of baseball cards and soccer cards? Explain.

For each type of card, write a rule and make a table. On the same grid, graph the ordered pairs in each table.

To make sense and persevere, graph ordered pairs then analyze the graph.

Baseball Cards: Start at 28 and add 6.

Months	Start	1	2	3	4	5	6
Baseball Cards	28	34	40	46	52	58	64

Soccer Cards: Start at 16 and add 4.

Months	Start	1	2	3	4	5	6
Soccer Cards	16	20	24	28	32	36	40

He will never have the same number of baseball cards and soccer cards. The lines are getting farther apart, so the number of soccer cards will never catch up.
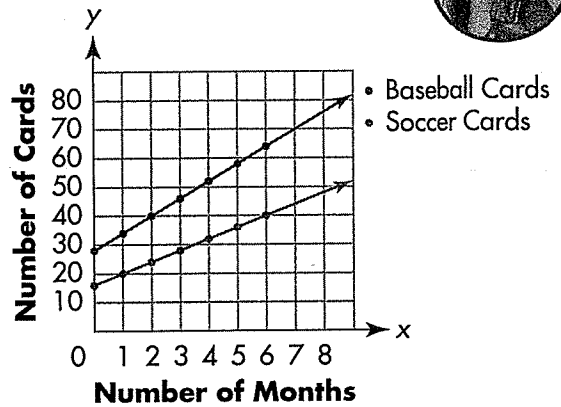
Make Sense and Persevere

The stingray tank contains 6 inches of water. The shark tank is empty. Each hour, 4 inches of water are added to the stingray tank and 6 inches are added to the shark tank. Will the water in the shark tank ever be as deep as the water in the stingray tank? Explain.

Exit Ticket 1-3

Hours	Start					
Depth (in.)	6					

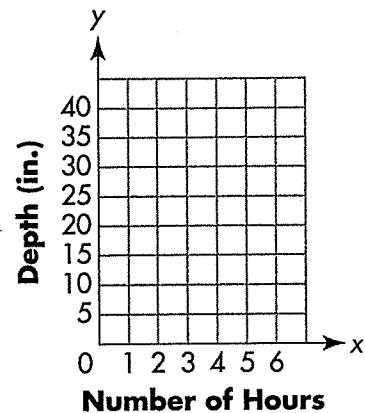| Hours	Start					
Depth (in.)	0					

1. Write a rule and complete each table.

   Rule: _____

   Rule: _____

2. Graph the ordered pairs in each table.

3. Explain whether the depth of water in the two tanks will ever be equal.
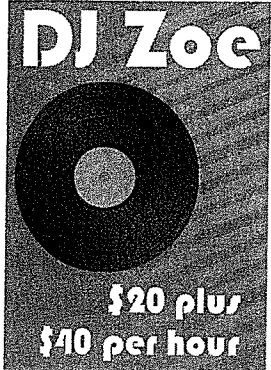
Fall Festival

The park district wants to hire a deejay for the Fall Festival. They expect the festival to last no more than 6 hours. Which deejay would be less expensive?

DJ Sammy

$90 plus
$30 per hour

DJ Zoe

$20 plus
$40 per hour

4. **Make Sense and Persevere** How can you use tables and a graph to solve the problem?

5. **Use Appropriate Tools** For each deejay, write a rule and complete the table.
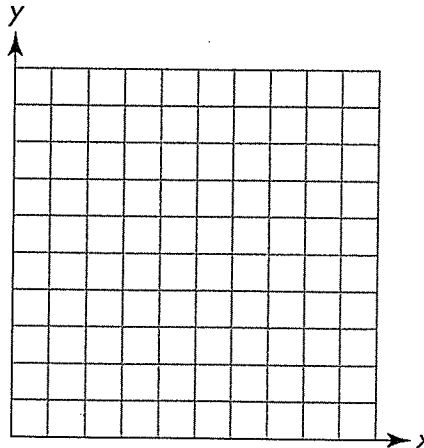
Rule: _____

Hours	Start					
Cost ($)	90					

Rule: _____

Hours	Start					
Cost ($)	20					

When you make sense and persevere, you use a strategy that makes sense for the problem.

6. **Use Appropriate Tools** On the grid, graph the ordered pairs in each table.

7. **Be Precise** Which deejay would be less expensive?
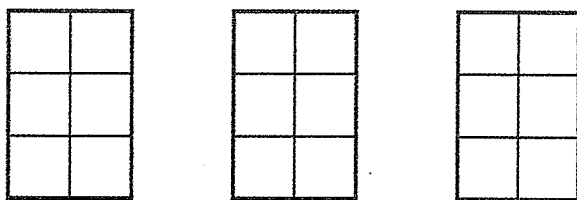
Standards Review

Practice ▶ **Dividing Unit Fractions in Word Problems**

Study the example below. Then solve problems 16–18.

Example

Sierra has a photo album with 3 empty pages. Each photo uses $\frac{1}{6}$ of an album page. How many photos can Sierra put on the empty pages?

Look at how you could show your work using rectangles.

6 photos will fit on one page, so 18 photos will fit on 3 pages.

Solution _18 photos_

The student used a model to visualize the problem.

Pair/Share
What related equations can you write to represent the problem?

16 Corrine picked $\frac{1}{4}$ gallon of blackberries. She poured the berries equally into 4 containers. What fraction of a gallon is in each container?

Show your work.

Can I draw a model to help understand the problem?

Pair/Share
How will the answer compare to $\frac{1}{4}$ gallon?

Solution _____

17 Cooper's USB drive is $\frac{1}{2}$ full with 5 video files. Each video file is the same size. What fraction of the USB drive does 1 video file use?

Show your work.

Solution _____

18 Devonte is studying for a history test. He uses $\frac{1}{8}$ of a side of one sheet of paper to write notes for each history event. He fills 2 full sides of one sheet of paper. Which expression could be used to find how many events Devonte makes notes for? Circle the letter of the correct answer.

A $2 \times \frac{1}{8}$

B $2 \div \frac{1}{8}$

C $\frac{1}{8} \times 2$

D $\frac{1}{8} \div 2$

Barry chose **D** as the correct answer. How did he get that answer?

_____

_____

_____

_____

Practice ▶ Dividing Unit Fractions in Word Problems

Solve the problems.

1 Elise picks 6 pounds of apples. She uses $\frac{1}{2}$ pound of apples to make 1 container of applesauce. How many containers of applesauce can Elise make with all the apples?
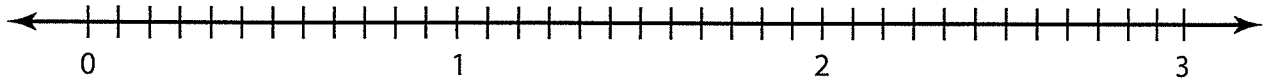
  A 12 containers

  B $6\frac{1}{2}$ containers

  C $5\frac{1}{2}$ containers

  D 3 containers

2 Students are running in a relay race. Each team will run a total of 3 miles. Each member of a team will run $\frac{1}{3}$ mile. How many students will a team need to complete the race?

You may use the number line to help find your answer.

Answer _____ students

] Mr. Bernstein will cut 8 pies into pieces that are each $\frac{1}{6}$ of the whole. After he cuts the 8 pies, how many pieces will Mr. Bernstein have?

Answer _____ pieces

] Marina has a pattern to make bows that requires $\frac{1}{4}$ yard of ribbon for each bow.

How many bows can Marina make from 1 yard of ribbon? How many bows can Marina make from 2 yards of ribbon?

Answer _____

Use words or an equation to describe a rule to find the number of bows Marina can make if you know how many yards of ribbon she has.

Answer _____

_____

Use your rule to find how many bows Marina can make if she has 18 yards of ribbon.

Answer _____ bows

Name _____