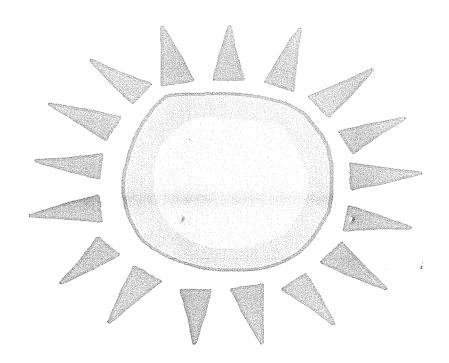
5th Grade Math

Week of May 24 - May 28, 2021



Name _____

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

1. Select all of the following statements that are true.

The x-axis is a horizontal line.

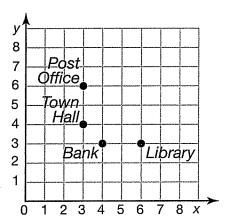
The *y*-coordinate is the second number in an ordered pair.

To reach the point (5, 2), move a distance of 5 units up on the y-axis and then move a distance of 2 units to the right.

The origin is the only point that is on both the *x*-axis and the *y*-axis.

The ordered pairs (3, 4) and (4, 3) name the same point.

2. Nancy made a map of her town. Which ordered pair tells you where the post office is in Nancy's town?



- **(**3, 4)
- **©** (3, 6)
- **B** (4, 3)
- **(**6, 3)
- **3.** Clyde bought 4 CDs on sale at \$1 off each CD. The regular price for each CD was \$12. Which expression describes the final amount he should pay?
 - **(A)** $(12 \times 4) 1$
- \bigcirc 4+1-12
- **B** $4-1 \times 12$
- (12 1) \times 4

4. Jeff uses 116 rubber bands to make a rubber-band ball. He estimates that he has used 448 rubber bands to make 12 rubber-band balls of the same size. Use estimation to check and explain whether his answer is reasonable or not.

5. Juan has put together 325 pieces of a puzzle that has 500 pieces. He can put together 25 pieces every hour. How long will it take him to finish the puzzle?

6. A pool is 2 meters deep, 4 meters wide, and 8 meters long. Each cubic meter holds 1,000 liters of water. How many liters of water are in the pool?

7. Emma buys a book and gives the clerk \$13.00. How much did the book cost if her change is \$0.33?



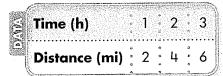




Additional Practice 14-3 Solve Problems Using Ordered Pairs

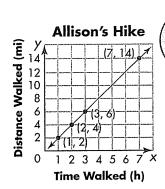
Another Look!

Allison can hike 2 miles in an hour. At that speed, how far would she walk in 7 hours?



Plot the ordered pairs from the table. Draw a line to show the pattern. Then extend the line to where the x-coordinate is 7. Read the y-coordinate when the x-coordinate is 7. The y-coordinate is 14.

So, Allison can hike 14 miles in 7 hours.

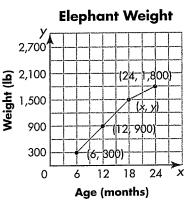


Let x be the number of hours Allison walks and let y be the number of miles she walks.

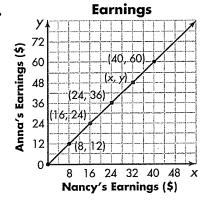


In 1 and 2, find the missing coordinates and tell what the point represents.

1.



2.



Exit

Ticket

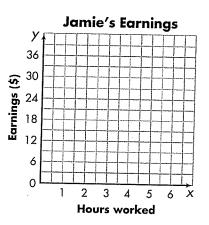
- **3.** Write the coordinates of another point on the line in Exercise 2. Then plot and label the point on the graph.
- **4.** What does the ordered pair for the point you found in Exercise 3 represent?

In **5–7**, use the graph at the right.

5. Jamie is making a graph to show her total earnings, y, after babysitting for x hours. Graph Jamie's first four points below on the grid at the right. Use a ruler to draw a line connecting the points.

(1,6) (2,12) (3,18) (4,24)

- **6.** Describe what one of the points represents.
- 7. **Higher Order Thinking** Write a rule to describe the relationship shown in the graph. Then name two other points that would be on the graph if the line were extended.



8. OVER SET OF OVER SET O

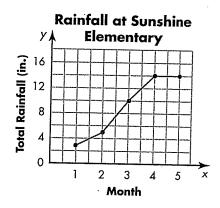
x-axis y-axis origin

On a coordinate grid, the _____is horizontal.

9. Be Precise The area of a rectangle is 105 square centimeters. The width of the rectangle is 7 centimeters. What is the perimeter of the rectangle?

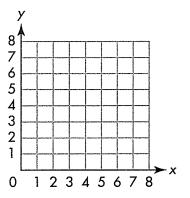
Assessment Practice

- **10.** What does the point (3, 10) represent on the graph at the right?
 - After 3 months, the total rainfall was 7 inches.
 - B After 3 months, the total rainfall was 10 inches.
 - © After 10 months, the total rainfall was 3 inches.
 - After 10 months, the total rainfall was 7 inches.

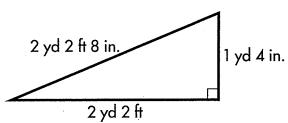


- 1. Erin has $\frac{5}{8}$ pound of cheese. She uses $\frac{2}{5}$ pound in sandwiches. What common denominator would you use to subtract $\frac{2}{5}$ from $\frac{5}{8}$?
 - **(A)** 16
 - **B** 20
 - © 24
 - **(D)** 40
- 2. What is the first operation you should perform to evaluate the expression $20 + (17 9) \times 4$?
 - A Division
 - B Multiplication
 - © Addition
 - Subtraction
- **3.** Which of the following is the best estimate for $2,603 \div 28$?
 - About 9
 - B About 11
 - © About 90
 - About 110
- **4.** Kyra plots Point *X* at (5, 9). From Point *X*, she moves 3 units to the left and 6 units up and plots Point *Y*. What are the coordinates of Point *Y*?
 - **(**2, 3)
 - **B** (2, 15)
 - © (8, 3)
 - **(**8, 15)

5. The Chen family visited the zoo at Z(3, 5), the park at P(6, 2), and the theater at T(1, 4). Graph and label each point to locate the zoo, park, and theater on the grid below.



- 6. Write and solve a division equation to find the number of $\frac{1}{3}$ -pound servings that can be made from 5 pounds of salmon.
- **7.** Kayla's vegetable garden has the shape of a right triangle.



Find the perimeter of the garden in feet.

8. Alex paid a fee of \$125.50 to join his health club and pays \$45.80 per month in dues. What was the total cost of his membership for the first year?









Additional Practice 14-4 Reasoning

Another Look!

A blue swimming pool contains 5 inches of water. It is filled with 2 more inches of water each hour. A red swimming pool contains 25 inches of water. The water is drained 3 inches each hour. How much water will be in the red pool when the blue pool has 19 inches of water?

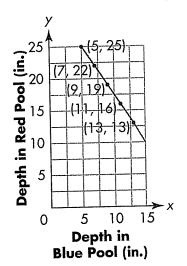
You can use a table and graph to model the math.

Dep	oth of	٧	Vat	er	· (in.)	
E Hour	: Start	s	1	# #	2	: 3	4
Blue Pool	: 5	•	7	9 G	9	: 11	: 13
Red Pool	25	4	22	•	19	: 16	: 13

The ordered pairs show a pattern. Each hour, the x-coordinate increases by 2, and the y-coordinate decreases by 3.

Extend the pattern until the x-coordinate is 19: (15, 10), (17, 7), (19, 4)

When the blue pool has 19 inches of water, the red pool will have 4 inches of water.

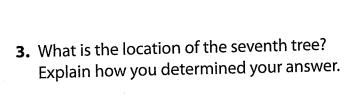


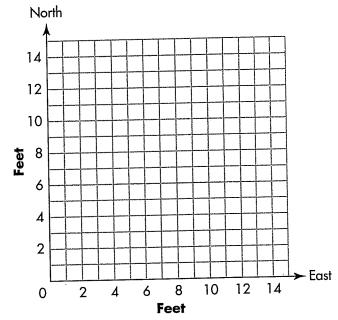
Exit 1-3 Ticket

Reasoning

A tree farm owner uses a grid to mark where to plant trees in the spring. The first tree is planted at (2, 3). Each of the other trees is planted 3 feet east and 2 feet north of the previous tree.

- 1. Draw and label the locations of the first four trees on the grid.
- 2. Describe the pattern of the points that represent the tree's locations.







Apple Picking

The Bransen Family picked 20 red apples, 28 yellow apples, and $\frac{1}{2}$ bushel of green apples. Starting the following day, they ate 2 red apples and 3 yellow apples every day. When 6 red apples are left, how many yellow apples will be left?

4. Make Sense and Persevere Complete the table to show how many red and yellow apples there are every day for the first 4 days.

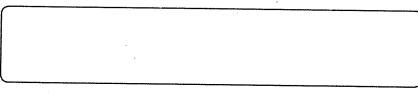
Number of Apples					
Day	Start	1	2	3	4
Red Apples	20				
Yellow Apples	28				

coordinate grid to reason about the relationship between the points.

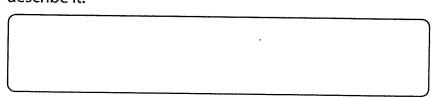
You can use the



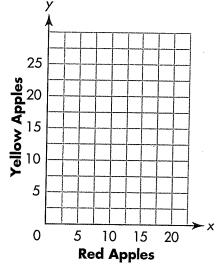
- **5.** Label the graph and then plot the data points from your table.
- **6. Reasoning** Can you draw a line through the plotted points? If so, what does that mean?



7. Look for Relationships Is there a pattern? If so, describe it.



8. Reasoning When 6 red apples are left, how many yellow apples will there be? Explain how you determined your answer.



1. A car travels at a speed of 55 miles per hour. A graph shows the relationship between the time, in hours, and the distance, in miles, the car travels. The x-coordinate represents time, and the y-coordinate represents distance. Select all the ordered pairs that are on a line representing the relationship between time and distance of the car.

(110, 2)

(3, 165)

(5, 275)

(4, 200)

(6, 330)

2. Cheyenne brings juice boxes for everyone on her softball team. There are 16 players, including herself. Everyone gets two juice boxes. Juice boxes are sold in packages of 8. Which expression can be used to find the number of packages of juice boxes she needs to buy?

(A) $(16 \div 2) \div 8$

B (16 ÷ 2) \times 8

© $(16 \times 2) \div 8$

 \bigcirc (16 \times 2) \times 8

3. A store is having a clearance sale. The sales price is $\frac{1}{4}$ of the original price. Macy wants to buy a pair of sunglasses that originally cost \$16 and a pair of sandals that originally cost \$24. How much money will she save if she buys these two items on sale?

(A) \$10

© \$30

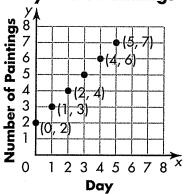
(B) \$20

(D) \$40

For **4** and **5**, use the coordinate grid.

Tyrese has finished two paintings. He decides to paint 1 picture every day. The graph shows the relationship between the number of days and the number of paintings Tyrese has painted.





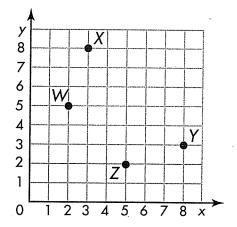
4. Write the missing coordinates.

5. What does the point (5, 7) represent?

6. Sean swam 475 meters and Callie swam 0.62 kilometer. Which of them swam farther? Explain.

.

1. Which set of directions explains how to get from Point *Y* to Point *Z*?



- (A) Move 1 unit right and 3 units up.
- (B) Move 3 units right and 1 unit down.
- © Move 2 units up and 6 units right.
- Move 3 units left and 1 unit down.
- 2. An apartment complex has 91 apartments. There are 177 cars in the complex parking lot. Which is the best estimate of the number of cars per apartment?
 - A About 1
 - B About 2
 - C About 10
 - D About 20
- 3. Which statement is true?
 - \triangle 5 cups 3 fl oz > 50 fl oz
 - B 3 pt 1 c < 1 qt</p>
 - \bigcirc 2 gal 3 qt > 6 qt
 - ① 3 qt 1 pt < 5 pt

4. Insert parentheses to make the statement true.

$$5 + 7 - 9 - 8 = 11$$

5. Find the sum. Use benchmark fractions to determine if your answer is reasonable.

$$1\frac{3}{8} + 3\frac{1}{4} + 4\frac{7}{12}$$

-	
-	

6. Malena says the product of 0.04×8 is 3.2. Is she correct? Explain your answer.

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Additional
Practice 15-1
Numerical Patterns

Another Look!

Cara started with \$2. Her sister Chloe started with \$7. Both will earn \$2 each day for doing chores. How much will each have after five days? What relationship do you notice between how much each sister has after each day?

Step 1

Complete the table. Use the rule "add \$2" to help you.

Total Earnings				
Day Cara Chloe				
Start	\$2	\$7		
1	\$4	\$9		
2	\$6	\$11		
3	\$8	\$13		
4	\$10	\$15		
5	\$12	\$17		

So, after five days, Cara has \$12 and Chloe has \$17.

Step 2

Look at each row to compare corresponding terms.

After each day, Chloe has \$5 more than Cara.



Exit Ticket 1-2

In 1 and 2, use the table.

- 1. Becky and Anton work at an apple orchard. At noon, Becky had picked 75 apples and Anton had picked 63 apples. Each of them picks 20 more apples each hour after noon. How many apples will each of them have picked at 5 p.m.? Use the rule "add 20" to help you complete the table.
- 2. Construct Arguments What relationship do you notice between how many apples Becky has picked and how many apples Anton has picked at the end of each hour? Explain.

Total Apples Picked				
	Becky	Anton		
Noon	75	63		
`1 р.м.				
2 р.м.				
3 р.м.				
4 P.M.				
5 p.m.				

- 3. Susie had received 9 text messages when she turned her phone on. She received 15 text messages each hour after that. Victor had received 27 text messages when he turned his phone on. He received 15 text messages each hour after that. How many messages did each person receive after 4 hours? Use the rule "add 15" to help you complete the table.
- **4. Higher Order Thinking** What relationship do you notice between the total number of text messages each person had received after each hour? Explain.

Total Text Messages Received			
Hour	Susie	Victor	
Start	9	27	
1			
2			
3			
4			

- **5. Number Sense** Mr. Kim has a pitcher that contains 16 cups of juice. How many one-third cup servings are in 16 cups?
- 6. Pierre is using centimeter cubes to build a model. He makes a rectangular prism that is 20 cubes long, 8 cubes tall, and 12 cubes wide. What is the volume of Pierre's model?

Assessment Practice

7. Brian and Christina started keeping track of their workouts. Brian did 85 sit-ups the first week and 90 sit-ups each week after that. Christina did 65 sit-ups the first week and 90 sit-ups each week after that.

How many sit-ups will each person have done after 5 weeks?

- A Brian: 425 sit-ups Christina: 325 sit-ups
- B Brian: 450 sit-ups Christina: 450 sit-ups
- © Brian: 425 sit-ups Christina: 445 sit-ups
- D Brian: 445 sit-ups Christina: 425 sit-ups

8. Which of the following are true statements about the relationship between the numbers of sit-ups Brian and Christina have done after each week?

Christina has always done
20 more sit-ups than Brian.

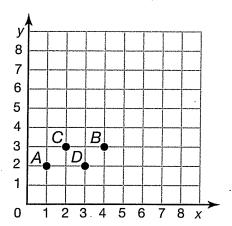
- Brian has always done 25 more sit-ups than Christina.
- Christina has always done 20 fewer sit-ups than Brian.
- Brian has always done 20 more sit-ups than Christina.

202

1. Brianna earns \$12 an hour and Eric earns \$8 an hour. Select all statements that are true if they both work the same number of hours.

Brianna earns a total of \$4 more
than Eric.

- Brianna earns twice as much as Eric.
- Eric earns $\frac{2}{3}$ as much as Brianna.
- Eric earns a total of \$12 less than Brianna.
- Brianna earns $1\frac{1}{2}$ times as much as Eric.
- **2.** Which point on this coordinate grid is named by the ordered pair (2, 3)?



- A Point A
- © Point C
- B Point B
- Point D
- 3. Find the difference.

$$\frac{7}{8} - \frac{2}{3}$$

- **A** $\frac{5}{24}$
- © $\frac{5}{16}$
- (B) $\frac{7}{24}$
- (D)

- **4.** A store has 895 DVDs to put in racks. Each rack holds 24 DVDs. How many racks will the store need to hold all the DVDs?
- 5. Anna and Grace are twin baby girls. At birth, Anna was 18 inches long and Grace was $19\frac{1}{2}$ inches long. Each of them grew $\frac{3}{4}$ inch per month for the first 5 months. Complete the table to show the length of each baby at the end of each of the first 5 months.

Baby Lengths (in.)

Month	Anna	Grace
Birth	18	19 <u>1</u>
1		
2		
3		
4		
5		

6. Chris can buy an online magazine subscription for \$5.99 per month or \$65 per year. How much will he save by paying for the whole year at once rather than one month at a time?

Another Look!

Ira makes a table showing the relationship between the number of yards, feet, and inches. How many feet and inches are in 6 yards? What do you notice about the number of feet and inches?



Step 1

Complete the table.

Yards	Feet	Inches
1	3	36
2	6	72
3	9	108
4	12	144
5	15	180
6	18	216

There are 18 feet or 216 inches in 6 yards.

Step 2

Compare the number of feet to the number of inches to find a relationship.

$$3 \times 12 = 36$$

$$6 \times 12 = 72$$

$$9 \times 12 = 108$$

$$12 \times 12 = 144$$

$$15 \times 12 = 180$$

Team

2

$$18 \times 12 = 216$$

So, there are 12 inches for every foot.

Forwards

Exit Ticket 1-2

Defensemen

In 1 and 2, use the rules "add 12" and "add 6" to help you.

1. Each team

12 forwards the table to defensemen are on 6 teams.

in a youth hockey league has	
s and 6 defensemen. Complete	
show how many forwards and	

4 5 6

2. What relationship do you notice between the number of forwards and the number of defensemen?

3. Jamie makes a table to show the relationship between meters, centimeters, and millimeters. Use the rule "add 100" to complete the column for the number of centimeters. Then use the rule "add 1,000" to complete the column for the number of millimeters. How many centimeters are in 15 meters? How many millimeters?

Meters	Centimeters	Millimeters
1	100	1,000
2		
3		
4		
5		

- 4. Higher Order Thinking The distance between Jamie's house and her friend's house is 75 meters. If Jamie walks to her friend's house and back, how many centimeters does she walk? Explain.
- 5. Look for Relationships What relationship do you notice between the number of centimeters and the number of millimeters?

6. A recipe for bread uses $5\frac{3}{4}$ cups of white flour and $3\frac{1}{3}$ cups of wheat flour. How many more cups of white flour than wheat flour are used in the recipe? Write an equation and complete the bar diagram to solve.

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1225					0.00005 200	

Assessment Practice

At Ashley's Nursery, there are 12 rows of trees. In each row, there are 21 pine trees and 7 spruce trees. Make a table to help you solve the following.

- 7. How many of each type of tree are there in all?
 - 252 pine trees; 84 spruce trees
 - 231 pine trees; 74 spruce trees
 - © 84 pine trees; 252 spruce trees
 - 33 pine trees; 19 spruce trees

8. Which of the following are true statements about the relationship between the number of pine trees and spruce trees?

> There are always 14 more pine trees than spruce trees.

There are always 3 times as many spruce trees as pine trees.

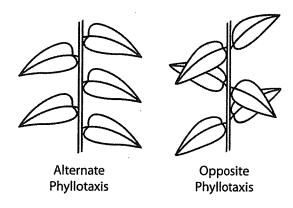
There are always 3 times as many pine trees as spruce trees.

There are always $\frac{1}{3}$ as many spruce trees as pine trees.

Standards Review

Phyllotaxis

Did You Know? In the study of plants, phyllotaxis is the arrangement of leaves on a plant's stem. There are two basic patterns—opposite and alternate. With an opposite phyllotaxis, a pair of leaves grows out from a plant's stem at the same level. With alternate phyllotaxis, leaves grow out from a plant's stem at different levels. Leaf arrangements have inspired and fascinated artists, sculptors, architects, and mathematicians since the beginning of time.



A dogwood tree exhibits opposite phyllotaxis while a redbud tree shows alternating phyllotaxis. Greg has two tree seedlings. The dogwood seedling has 6 leaves and the redbud seedling has 16 leaves. Both seedlings grow 4 new leaves each week.

- 1 Use the rule "add 4" to complete the table.
- 2 How many leaves did each seedling have after 6 weeks?
- 3 What relationship do you notice between the total number of leaves each seedling has after each week?

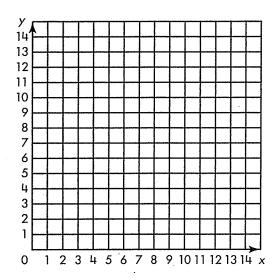
Total Leaves

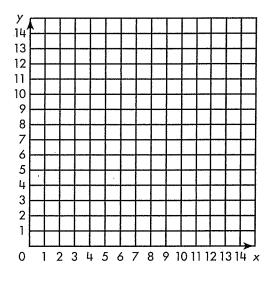
Dogwood	Redbud
6	16

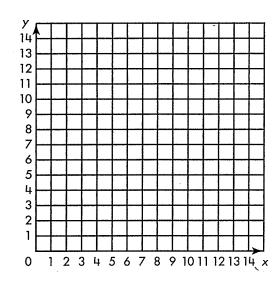
Extension If each seedling continues to grow 4 new leaves each week, how many leaves will each seedling have after 12 weeks?

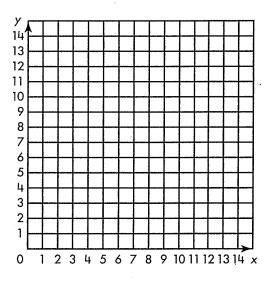
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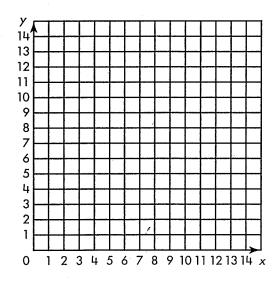
Teaching Tool . **20**

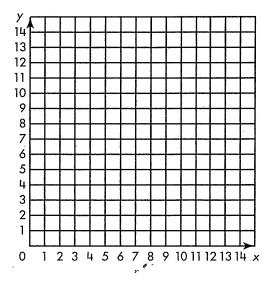










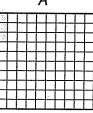


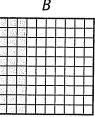
Think About Place-Value Patterns

Let's Explore the Idea Let's explore place-value patterns with another example using models. Each grid represents 1 whole.

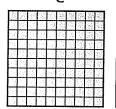


Α





C





2 Label models A, B, and C with a decimal to name the amount shaded.

 \blacksquare The shaded region of Model B is how many times the shaded region of Model A?

The shaded region of Model C is how many times the shaded region of Model B?

4 Use the models above to complete the equations.

$$0.3 \times 10 =$$

Now try these two problems.

5 Continue the \times 10 pattern to fill in the blanks.

0.003

0.03

0.3

300

6 Use the \div 10 pattern to fill in the blanks.

500

0.5

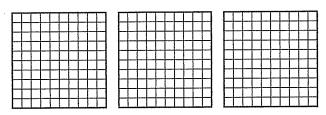
0.05

Let's Talk About It

Now let's explore how 0.30 compares to 0.3.



2 Look at the models in problem 2 and the labels you wrote. Now shade some or all of the grids in the model below to show 30 hundredths. Each grid represents 1 whole.



Find the model on the previous page that has the same shading as the model you shaded above. What label did you give that model on the previous page?

- Use the model you shaded in problem 7 to write a decimal for 30 hundredths. thirty hundredths = _____
- 9 How do both shaded models show that 30 hundredths is the same as 3 tenths?
- What equation can you write to represent "10 times 3 hundredths is 30 hundredths"?

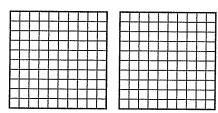
Try It Another Way

- Imagine a model shaded to show 0.001. How much would be shaded?
- 12 How would you shade a model to show ten thousandths?

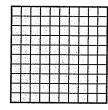
Connect Ideas About Place-Value Patterns

Talk through these problems as a class, then write your answers below.

Create Shade the models below to show how the value of 0.04 is related to the value of 0.4. Then write a division equation to represent the relationship.



Malyze Kiran showed 0.08 with the model below.



What is wrong with Kiran's model? What can be done to her model to show 0.08?

B Demonstrate A meter is one thousandth of a kilometer. Write an equation to show the relationship between 7 meters and 0.007 kilometer.

Practice Dividing Decimals

Solve the problems.

- Jordan has \$11.40 to spend at the used book store. Each book costs \$2.85. How many books can Jordan buy?
 - **A** 3
 - **B** 4
 - **C** 5
 - **D** 6
- Keith bought 3.4 pounds of peanuts on Monday, 2.5 pounds on Tuesday, and 4 pounds on Wednesday. He is going to divide the peanuts equally between himself and two friends. How many pounds of peanuts will each friend get?
 - A 99 pounds
 - **B** 33 pounds
 - C 9.9 pounds
 - **D** 3.3 pounds
- A sticker is 1.2 centimeters wide. How many stickers will fit edge to edge on a strip of paper that is 108 centimeters long?

Answer ______ stickers

- Which equation is true if you put 0.7 on the blank?
 - **A** \times 5.2 = 36.4
 - **B** 49 ÷ ____ = 70
 - **c** \div 3.5 = 0.02
 - **D** $9.1 \times _{---} = 63.7$

The width of a math textbook is 0.75 inch. How many math textbooks can be placed standing up on a shelf that is 18 inches wide?

Show your work.



Will the answer be greater than or less than 18?

Pair/Share

Explain how you decided what operation to use to solve the problem.

Solution	

A 3.25

B 6

Ç ,

D 13

Gwen chose **A** as the correct answer. How did she get that answer?



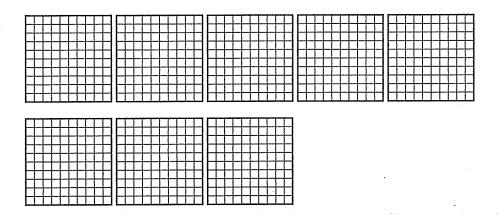
I could draw a model to represent this problem.

Pair/Share

Does Gwen's answer make sense?

Jamie has 5 jars to fill with beads for a carnival game. She has 7.5 cups of multi-colored beads. Jamie wants to put an equal amount of beads in each jar. How many cups of beads can she place into each jar?

Explain how you can use the model to solve the problem.



Answer	
	:
Use the model. How many cups of beads car	n Jamie place into each jar?
Answer cups	
Justify your answer.	
Answer	
·-	

✓ Self Check

Go back and see what you can check off on the Self Check on page 1.

Practice Solving Word Problems with Fractions

Solve the problems.

William compares monthly rainfall amounts for the summer months using the table below.

Month	Monthly Rainfall
June	3 3/10 inches
July	3 ³ / ₄ inches
August	$3\frac{1}{2}$ inches

About how much more rain fell in July than in June?

- A $\frac{1}{4}$ inch
- **B** $\frac{1}{2}$ inch
- C 1 inch
- **D** $1\frac{1}{2}$ inches
- Several expressions are shown. Which two expressions have a value greater than 2?

$$2\frac{1}{2}-1\frac{1}{8}$$

$$1\frac{5}{11} + \frac{3}{4}$$

$$2\frac{1}{2} - 1\frac{1}{8}$$
 $1\frac{5}{11} + \frac{3}{4}$ $3\frac{4}{5} - 1\frac{1}{3}$ $\frac{3}{8} + \frac{9}{10}$

$$\frac{3}{8} + \frac{9}{10}$$

Answer.

Choose an expression above. Explain how you can use number sense to decide if the expression is greater than or less than 2.

Answer _

The table below shows the thickness of coins.

Coin	Thickness
quarter	1 3/4 millimeters
dime	1 7/20 millimeters
nickel	1 <u>19</u> millimeters
penny	1 ½ millimeters

What is the total thickness of a stack that contains 1 dime and 1 penny? Write an expression and find the answer.

Show your work.

Answer _____ millimeters

4 Jimmy says $3\frac{4}{9} - 2\frac{5}{6}$ is $1\frac{1}{3}$.

Without finding the actual difference, explain why Jimmy's difference is or is not reasonable.

Find the actual difference.

Show your work.

Answer ____

Self Check Go back and see what you can check off on the Self Check on page 93.