تجميعة أسئلة وفق الهيكل الوزاري ريفيل

تاريخ نشر الملف على موقع المناهج: 05:35:19 2023-11-16 | اسم المدرس: Elatawy Alaa

التواصل الاجتماعي بحسب الصف السادس

روابط مواد الصف السادس على تلغرام

الرياضيات	اللغة الانجليزية	اللغة العربية	التربية الاسلامية

المزيد من الملفات بحسب الصف السادس والمادة رياضيات في الفصل الأول

|	
حل تجميعة أسئلة اختبارية وفق الهيكل الوزاري	1
مراجعة عامة وفق الهيكل الوزاري بريدج	2
حل مراجعة وفق الهيكل الوزاري ريفيل	3
تجميعة أسئلة وفق الهيكل الوزاري الجديد	4
نموذج الهيكل الوزاري الجديد ريفيل	5

Alhuiteen school EOT1 coverage GRADE 6

## Mathematics

Teacher :Alaa Elatawy

Academic Year العام الدراسي	2023/2024
Term الفصل	1
Subject المادة	Mathematics/Reveal الرياضيات/ريفيل
Grade الصف	6
Stream المسار	General العام
Number of MCQ عدد الأسئلة الموضوعية	15
Marks of MCQ درجة الأسئلة الموضوعية	4
Number of FRQ عدد الأسئلة المقالية	6
Marks per FRQ الدرجات للأسئلة المقالية	(6-9)
Type of All Questions نوع كافة الأسئلة	الأسئلة الموضوعية /MCQ الأسئلة المقالية/FRQ
Maximum Overall Grade الدرجة القصوى الممكنة	100
Exam Duration - مدة الامتحان	150 minutes
Mode of Implementation- طريقة التطبيق	Paper-Based
Calculator الآلة الحاسبة	Not Allowed غير مسموحة

| Part1	Type of Questions	FRQ/ مقالي	الدرجات لكل سؤال	7-10 درجات
1	Represent a collection of equivalent ratios as ordered pairs Graph a ratio relationship on the coordinate plane	(1-4)		Page :27-28

1. Lulah is buying beach balls for her beach themed party. Each package contains 6 beach balls. Generate the set of ordered pairs for the ratio relationship between the number of beach balls y and the number of packages x for a total of 1, 2, 3, and 4 packages. Then graph the relationship on the coordinate plane and describe the pattern in the graph. (Examples 1 and 2)

Beach Balls
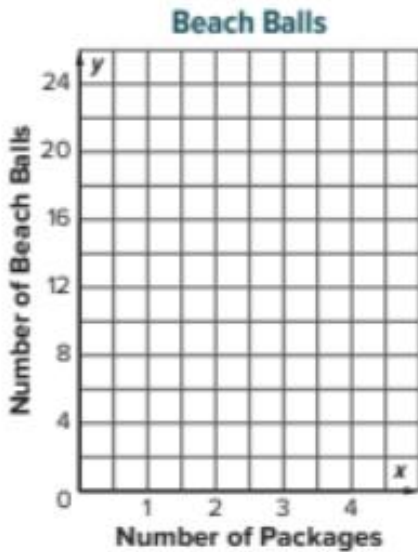
2. A sloth travels about 7 feet every minute. Generate the set of ordered pairs for the ratio relationship between the total distance traveled y and the number of minutes x for a total of 1, 2, 3, and 4 minutes. Then graph the relationship on the coordinate plane and describe the pattern in the graph. (Examples 1 and 2)

Sloths
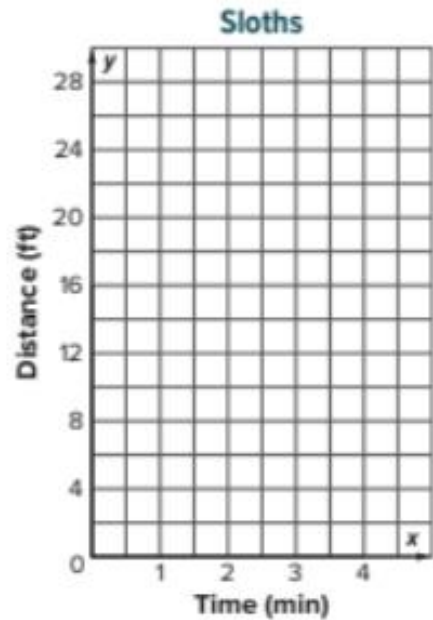
3. Two friends are making scrapbooks. The number of photos Lexi and Audrey place on each page of their scrapbooks is shown in the graph. Describe the ratio relationship for each person.

● Lexi
● Audrey

NEVER GIVE UP
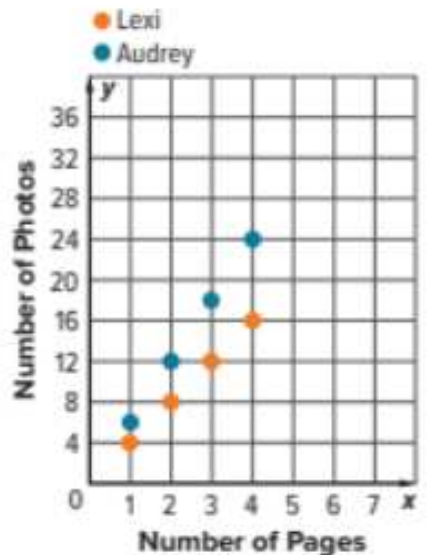
4. Multiselect Lacy is running laps around the track. The time in minutes and the number of laps ran are shown in the graph. Which of the following is true about the ratio relationship shown in the graph?
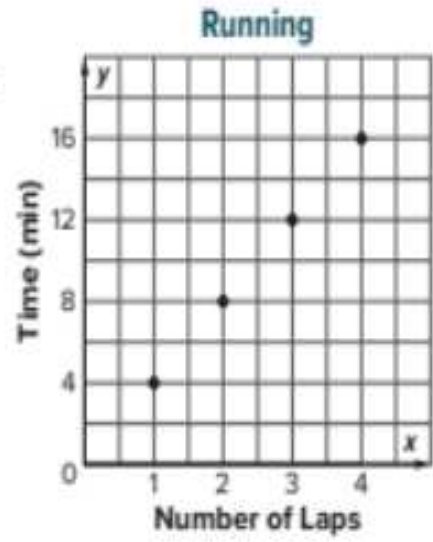
☐ Every 4 minutes, Lacy ran 1 lap.

☐ Lacy ran 8 laps in 2 minutes.

☐ It took Lacy 1 minute to run 4 laps.

☐ In 16 minutes, Lacy completed 4 laps.

☐ Based on the relationship, it would take Lacy 20 minutes to complete 5 laps.

Running

Time (min) vs *Number of Laps*

2	Compare ratio relationships that are shown using different representations	(1-5)	Page :35-36

1. Cereal Brand A advertises that they have 60 raisins in their 24-ounce box of cereal. The advertised ratio of raisins to ounces for two other cereal brands are shown in the table and graph. Which brand advertises the greatest ratio of raisins to ounces of cereal? Justify your response. (Example 1)

Brand B

Ounces of Cereal	6	12	20	24
Raisins	18	36	60	72

Brand C

Number of Raisins vs Ounces of Cereal
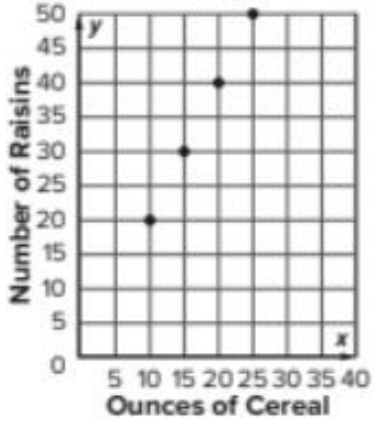
2. At the gym, Alex spends 24 minutes doing resistance training for every 30 minutes spent doing cardio exercises, Carisa spends 15 minutes on resistance for every 20 minutes on cardio, and Manuel spends 14 minutes on resistance for every 15 minutes on cardio. Which person has the greatest ratio of minutes spent on resistance to minutes spent on cardio? (Example 2)

Alex

Resistance (min)		
Cardio (min)		

Carisa

| Resistance (min)		
Cardio (min)		

Manuel

Resistance (min)		
Cardio (min)		

3. **Open Response** Mrs. Quinto is comparing the Calories in different types of bread. Wheat bread has 150 Calories for every 2 slices. The Calories in two other types of bread are shown in the table and graph. Which bread has the greatest ratio of Calories to slices?

White Bread

Slices	Calories
2	160
4	320
6	480

Rye Bread
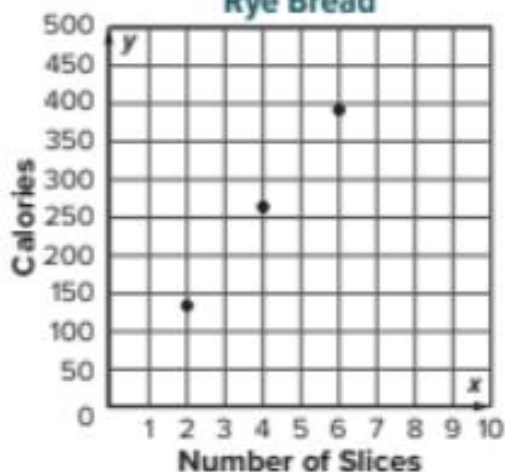
4. Mrs. Gonzalez wants to hire a catering company for her daughter's quinceañera. The ratios of the cost per person for a child and an adult for two different companies are shown in the table. Mrs. Gonzalez is planning on 25 adults and 12 children adding the party. How much less will it cost for her to hire Planning Pros than Party Time?

	Party Time	Planning Pros
Cost per Adult ($)	10.50	9.00
Cost per Child ($)	6.00	7.50

5. Charlie, Beth, and Miguel all babysit kids in their neighborhood. The table shows the number of hours and the amount each of them earned last night. If each person babysits for 5 hours next weekend, which person will earn the most money? Use a coordinate plane if needed to solve.

	Charlie	Beth	Miguel
Number of Hours	3	4.5	4
Total Earned ($)	28.50	42.00	40.00

3	Estimate the percent of a number by using benchmark percents and rounding	7-10)	Page :119

7. Emilia and her three sisters went out to dinner. The total cost of their dinner was $38.75. They want to leave a tip that is 23% of the total bill. About how much of a tip should they leave?

8. Karl earned $188 last month doing chores after school. If 68% of the money he earned was from doing yard work, about how much did Karl earn doing yard work?

9. The concession stand at a football game served 288 customers. Of those customers, about 77% bought a hot dog. About how many customers bought a hot dog?

10. In a recent season, the Chicago Cubs won 64% of the 161 regular season games they played. About how many games did they win?

MISTAKES
are proof
that you
are
TRYING

4	Use the standard algorithm to divide multi-digit numbers when solving problems	(1-6)	Page :141

Find each quotient. (Examples 1–3)

1. 52,080 ÷ 15 = _____

2. 38,480 ÷ 26 = _____

3. 648 ÷ 18 = _____

4. 3,409 ÷ 14 = _____

5. 8,890 ÷ 40 = _____

6. 3,120 ÷ 64 = _____

5	Order rational numbers	(9-12)	Page :223

Order each set of rational numbers from least to greatest. (Example 4)

9. $\left[-4.25, -4\frac{7}{10}, -4\frac{3}{20}\right]$

10. $\left[-1.55, -1\frac{11}{100}, -1\frac{23}{25}\right]$

11. The change in runners' goals and their actual times is shown in the table. Order the changes from least to greatest.

Runner	Change (min)
Sean	-3.2
Lacy	$1\frac{2}{5}$
Maura	1.43
Amos	$-2\frac{1}{5}$

12. **Table Item** Order the numbers from least to greatest.

$$-1.75, 2, 1.25, -2, 0$$

least				greatest

6	Graph rational numbers in the coordinate plane	(1-14)	Page :235

Identify the quadrant in which each point is located. (Example 1)

1. $\left(-1\frac{1}{2}, -2\frac{1}{4}\right)$

2. $\left(5\frac{3}{4}, -6\frac{1}{5}\right)$
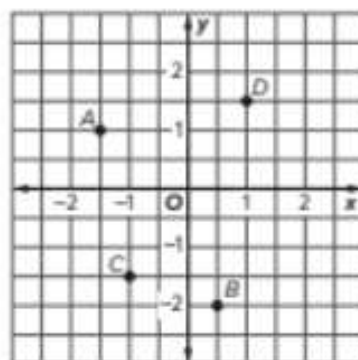
3. $\left(\frac{4}{5}, 3\frac{3}{4}\right)$

4. $\left(-3\frac{1}{2}, 2\frac{4}{5}\right)$

5. Identify the axis on which the point $\left(-\frac{2}{3}, 0\right)$ is located. (Example 2)

6. Identify the axis on which the point $\left(0, 6\frac{3}{5}\right)$ is located. (Example 2)
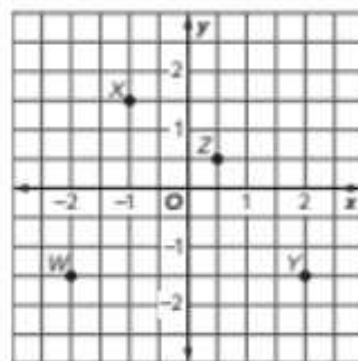
Use the coordinate plane. Identify the ordered pair that names each point. (Example 3)
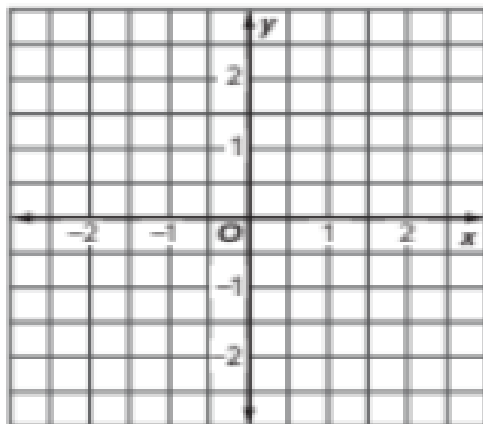
7. A _____

8. B _____

9. C _____

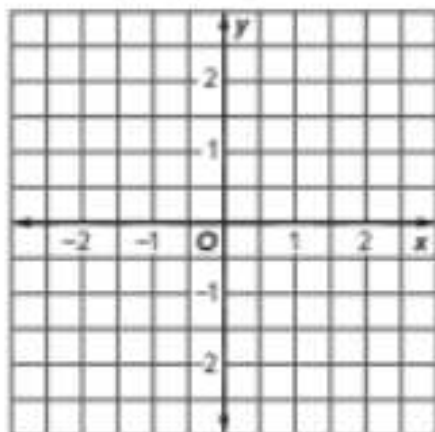Use the coordinate plane. Identify the point for each ordered pair. (Example 4)

10. $\left(\frac{1}{2}, \frac{1}{2}\right)$ _____

11. $\left(-1, 1\frac{1}{2}\right)$ _____

12. $\left(-2, -1\frac{1}{2}\right)$ _____

13. Graph $A\left(\frac{1}{2}, 1\right)$. (Example 5)

14. Grid Graph $X\left(-1\frac{1}{2}, 2\right)$.

"D🍩NUT"
STRESS...
JUST DO
your
BEST

4 درجات	الدرجات لكل سؤال	موضوعى/MCQ	Type of Questions	Part 2
7		(1-6)	Show a ratio relationship between two quantities using different representations .	Page :11

1. In Suri's coin purse, she has 6 dimes and 4 quarters. Martha has 5 dimes and 3 quarters. Suri thinks that the ratio of dimes to quarters in both purses is the same because they each have 2 more quarters than dimes. Is the same ratio of dimes to quarters maintained? Justify your response. (Example 1)

2. In a trivia game, Levi answered 8 questions correctly out of 10 turns in the game. He then answered the next three questions correctly. He reasoned that because he added 3 to both the total questions and his correct responses, that the ratio of correct answers to total questions remained the same. Is he correct? Justify your response. (Example 1)

3. Riley needs to make fruit punch for the family reunion. One batch of punch has the ingredients shown. If the punch bowl holds 27 cups, how many cups of orange juice will she need to keep the ratio in a full punch bowl the same? (Example 2)

Item	Cups
Cranberry Juice	4
Lemon Lime Soda	1
Orange Juice	2
Pineapple Juice	2

4. A small fruit basket contains the fruits shown. A large basket has the same ratio of fruits as the small basket. If the large basket has 42 total pieces of fruit, how many are pears? (Example 2)

Type of Fruit	Amount
Apple	6
Orange	5
Pear	3

5. Mrs. Santiago is buying doughnuts for her office. Each box contains 6 glazed, 4 cream filled, and 2 chocolate flavored doughnuts. If there were 20 total cream filled doughnuts, how many chocolate doughnuts did she buy? (Example 3)

6. A small batch of trail mix contains 2 cups of raisins, 2 cups of peanuts, 1 cup of sunflower seeds, and 1 cup of chocolate coated candies. A large batch has the same ratio of ingredients as a small batch. If the large batch has 8 cups of peanuts, how many cups of sunflower seeds are in a large batch? (Example 3)

| 8 | Show a ratio relationship between two quantities using tables of equivalent ratios and double number lines. | EX 1-3 | Page :12-17) |

To make yellow icing, Amida mixes 6 drops of yellow food coloring with 2 cups of white icing.

How many drops of yellow food coloring should Amida mix with 8 cups of white icing to get the same shade of yellow?

🌐 Example 2 Scale Backward to Find Equivalent Ratios

Akeno mixes three sample containers of yellow paint with four sample containers of red paint to create his favorite shade of orange paint. His little sister Aiko wants to create the same shade of orange paint, but she only has two sample containers of red paint.
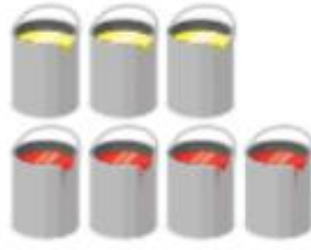
What should Aiko do to create the same shade of orange paint?

🌐 Example 3 Scale in Both Directions

Natasha made raspberry punch for a party by mixing 9 fluid ounces of fruit punch, 3 liters of soda, and 6 scoops of raspberry ice cream. Halfway through the party, the punch bowl was empty.

If Natasha only has 6 fluid ounces of fruit punch left, how much ice cream does she need to make another batch of punch?
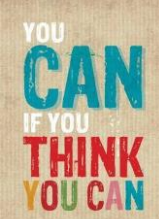
| 9 | Solve real-world problems involving ratio relationships by using bar diagrams, double number lines, and equivalent ratios. | (1-6) | Page :45 |

Use any strategy to solve each problem. (Examples 1–3)

1. A survey showed that 4 out of 5 students own a bicycle. Based on this result, how many of the 800 students in a school own a bicycle?

2. A survey of Mr. Thorne's class shows that 5 out of 8 students will buy lunch today. Based on this result, how many of the 720 students in the school will buy today?

3. The ratio of the number of baskets made by Tony to the number of baskets made by Colin is 2 to 3. Tony made 10 baskets. How many baskets did Colin make?

4. In the school choir, there is 1 boy for every 4 girls. There are a total of 11 boys. How many girls are in the choir?

5. Liberty Middle School has 600 students. In Anna's class, 3 out of 8 students walk to school. How many students at the school can be expected to walk to school?

6. Pine Hill Middle School has 300 students. In Zoey's class, 2 out of 5 students belong to a club. How many students at the school would you expect belong to a club?

DREAM IT
BELIEVE IT
ACHIEVE IT

10	Use ratio reasoning to convert between customary units of measurement	(1-8)	Page :55

Use any strategy to solve each problem. (Examples 1 and 2)

1. Mrs. Menary made $4\frac{1}{2}$ quarts of lemonade for a school party. How many fluid ounces of lemonade did she make?

2. A class walked 2.5 miles for a walk-a-thon. How many yards did the class walk?

3. The Martinez family has $\frac{3}{4}$ gallon of orange juice in the refrigerator. How many cups of orange juice are in the refrigerator?

4. A grand piano can weigh $\frac{1}{2}$ ton. How many ounces can a grand piano weigh?

5. A female hippopotamus can weigh 48,000 ounces. How many tons can a female hippopotamus weigh?

6. At soccer practice, Tracey's best kick traveled a distance of 1,200 inches. For how many yards did she kick the ball?

7. An elephant can drink up to 6,400 fluid ounces of water a day. How many gallons of water can an elephant drink per day?

8. A recipe for ice cream calls for 56 fluid ounces of milk. How many pints of milk are there in the recipe?

Use any strategy to solve each problem.

1. A hippopotamus can run 6 kilometers in 15 minutes. At this rate, how far can the hippopotamus run in 1 minute? (Example 1)

2. Imena earned $261 last week. If she worked 18 hours and earned the same amount each hour, how much was she paid per hour? (Example 1)

3. A cat's heart beats approximately 45 times in 15 seconds. At this rate how many times does the cat's heart beat per second? (Example 1)

4. Mr. Farley used 4 pounds of hamburger to make 10 hamburger patties of the same size. How many pounds of hamburger did he use per patty? (Example 1)

5. At the school festival, Heather can buy 25 game tickets for $10, or she can pay $0.50 per game ticket. Which option has the lesser price per ticket? (Example 2)

6. At a toy store, Colton can buy a package of 6 mini footballs for $7.50, or a package of 8 mini footballs for $9.60. Which option has the lesser price per mini football? (Example 2)

7. The table shows the options Zoe's mother has for buying tickets to an adventure day camp for Zoe and 5 of her friends. Which option has the lesser cost per student ticket? (Example 2)
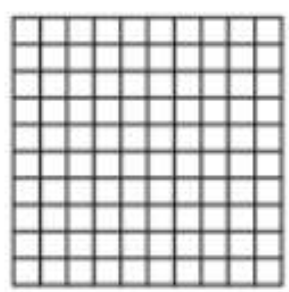
Adventure Camp Tickets	
Option	Cost ($)
6-pack of Student Tickets	126.00
Individual Student Ticket	21.50

| 12 | Model percents using 10×10 grids and bar diagrams | 1-7) | Page :83 |

For Exercises 1 and 2, identify the percent represented by each 10 × 10 grid. (Example 1)

1. _____

2. _____
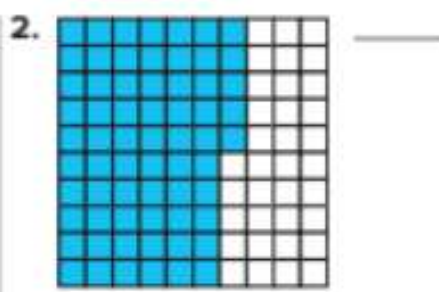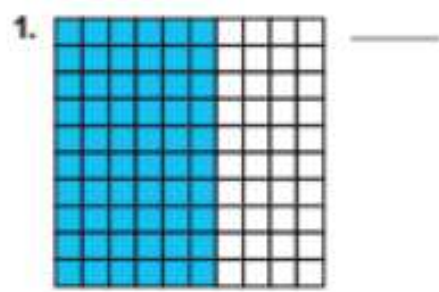
3. In a school survey, 12% of the students surveyed said they like camping. Shade the 10 × 10 grid to model 12%. (Example 2)
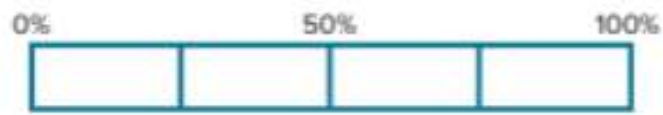

4. Of the students in the lunch line, 9% said they were buying strawberry milk. Shade the 10 × 10 grid to model 9%. (Example 2)
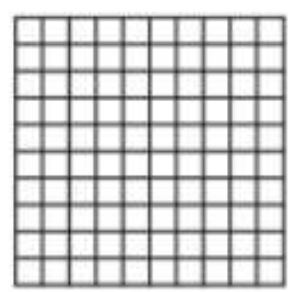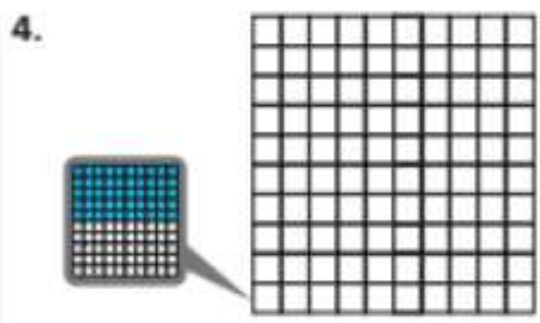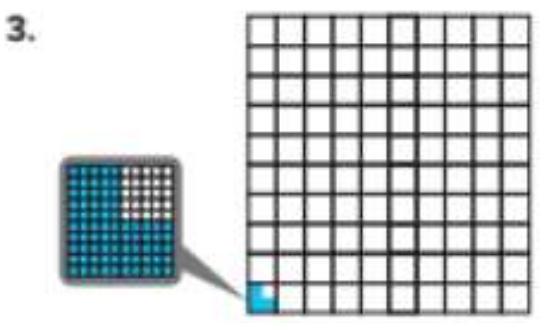

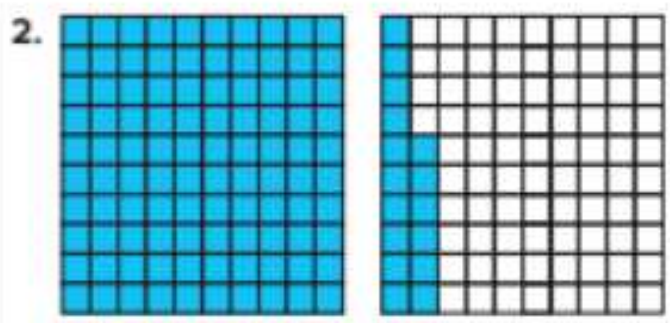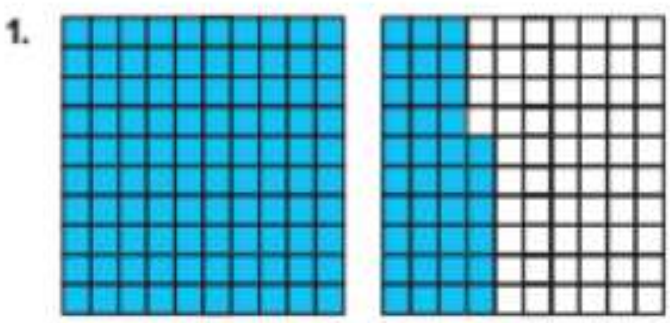For Exercises 5 and 6, identify the percent represented by each bar diagram. (Example 3)

5. _____

6. _____

7. Shade the bar diagram to model 25%.
(Example 4)

| 13	Use 10×10 grids and bar diagrams to represent percents greater than 100% or less than 1%	(1-6)	Page :91

Identify the percent represented by the 10 × 10 grids. (Examples 1 and 3)

1.

2.

3.

4.

5. The size of a large milkshake is 1.4 times the size of a medium milkshake. Write a percent that compares the size of the large milkshake to the size of the small milkshake. Then draw and shade 10 × 10 grids to model the percent. (Example 2)

6. The Freedom Tower is 1,776 feet tall. Mr. Feeman's students are building a replica of the tower for a class project that will stand 4.44 feet tall. Write a percent that compares the height of the replica to the height of the actual tower. Then shade the 10 × 10 grid to model the percent.

ununununu

BELIEVE
in
YOURSELF

ununununu
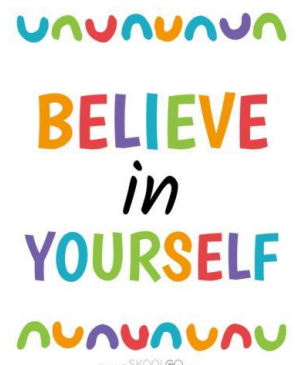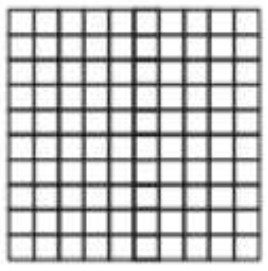
14	Relate fractions, decimals, and precents by using place-value reasoning and understanding a percent as a ratio that compares a number to 100	(1-9)	Page :101

Write each percent as a fraction in simplest form and as a decimal. (Example 1)

1. 45%　　　　　　　**2.** 72%　　　　　　　**3.** 80%

Write each fraction as a percent and as a decimal. (Examples 2 and 3)

4. $\frac{3}{20}$　　　　　　**5.** $1\frac{3}{4}$　　　　　　**6.** $\frac{5}{8}$

Write each decimal as a percent and as a fraction in simplest form. (Example 4)

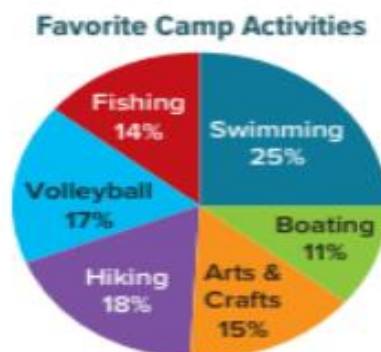**7.** 0.89　　　　　　　**8.** 0.82　　　　　　　**9.** 0.65

15	Find the percent of a number by reasoning about percent as a rate per 100 and by using bar diagrams,	(1-8)	Page :111

Use any strategy to solve each problem.

1. The graph shows the career interests of the students at Linda's school. Suppose there are 400 students at the school. How many of them want to be an athlete? (Example 1)

Future Careers

- Other 9%
- Teacher 23%
- Nurse 13%
- Athlete 12%
- Doctor 13%
- Undecided 30%

2. The graph shows the favorite activities of campers at a summer camp. Suppose there are 300 campers at the camp. How many campers favor fishing? (Example 1)

Favorite Camp Activities

- Fishing 14%
- Swimming 25%
- Volleyball 17%
- Boating 11%
- Hiking 18%
- Arts & Crafts 15%

15	Find the percent of a number by reasoning about percent as a rate per 100 and by using bar diagrams,	(1-8)	Page :111

Use any method to find the percent of each number. (Examples 2–4)

3. 15% of 240 = _____

4. 65% of 180 = _____

5. 250% of 82 = _____

6. 150% of 44 = _____

7. 0.15% of 350 = _____

8. 0.4% of 168 = _____

16	Solve problems by using the standard algorithms for addition, subtraction, multiplication, and division to compute with multi-digit decimals,	(1-8)	Page :153

Find each sum. (Example 1)

1. 34.672 + 15.31 = _____

2. 152.875 + 35.4 = _____

Find each difference. (Examples 2 and 3)

3. 139.65 − 59.623 = _____

4. 352.37 − 231.975 = _____

Find each product. (Example 4)

5. $0.025 \times 1.24 =$ _____

6. $17.15 \times 1.062 =$ _____

Find each quotient. (Example 5)

7. $32.674 \div 0.016 =$ _____

8. $3.825 \div 0.25 =$ _____

you're
AMAZING
just the way
YOU ARE

17	Apply prior knowledge about multiplication, division, and operations on multi-digit numbers to divide whole numbers by fractions ,	(4-9)	Page :165

4. What number multiplied by $\frac{3}{5}$ has a product of 1? (Example 2)

5. What number multiplied by $\frac{7}{10}$ has a product of 1? (Example 2)

Divide. Write in simplest form. (Example 4)

6. $3 \div \frac{1}{4} =$ _____

7. $4 \div \frac{2}{5} =$ _____

8. $6 \div \frac{2}{3} =$ _____

9. Marie is making scarves. She has 7 yards of fabric and each scarf needs $\frac{5}{8}$ yard of fabric. Find $7 \div \frac{5}{8}$. Then interpret the quotient. (Example 5)

18	Apply prior knowledge about multiplication and division by fractions to divide fractions by fractions	(1-6)	Page :175

Divide. Write in simplest form. (Example 1)

1. $\frac{5}{6} \div \frac{5}{12} =$ _____

2. $\frac{1}{3} \div \frac{1}{9} =$ _____

3. $\frac{3}{7} \div \frac{1}{14} =$ _____

4. Romeo had $\frac{3}{4}$ pound of fudge left. He divided the remaining fudge into $\frac{5}{16}$-pound bags. Write and solve an equation that models the situation. Then interpret the quotient. (Example 2)

5. Chelsea has $\frac{7}{8}$ pound of butter to make icing. Each batch of icing needs $\frac{1}{4}$ pound of butter. Write and solve an equation that models the situation. Then interpret the quotient. (Example 2)
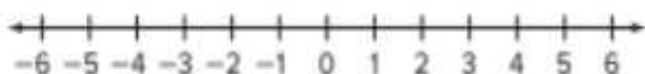
6. Write a story context for $\frac{5}{6} \div \frac{1}{6}$. Then find the quotient. (Example 3)
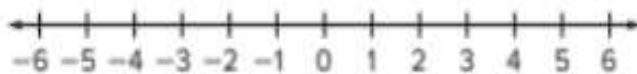
19	Use a number line to visually represent quantities in everyday life	(7-12)	Page :197

Graph each set of integers on a number line. (Example 2)
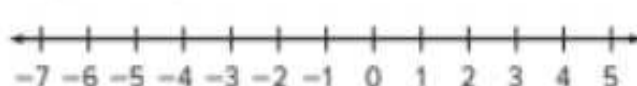
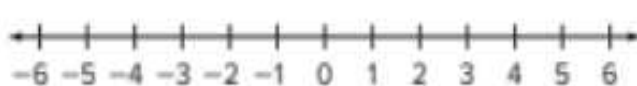**7.** $\{-2, 0, 4\}$

8. $\{5, -5, -6\}$

9. $\{-8, -4, 1\}$

10. $\{-7, 3, 5\}$

11. $\{7, -3, -1\}$

12. $\{-1, 0, 1\}$

20	order rational numbers	(5-8)	Page :223

Fill in the ◯ with <, >, or = to make a true statement. (Example 3)

5. -0.24 ◯ $-\frac{3}{16}$

6. $-\frac{5}{8}$ ◯ -0.76

7. $-4\frac{4}{25}$ ◯ -4.16

8. -5.52 ◯ $-5\frac{7}{15}$

Order each set of rational numbers from least to greatest. (Example 4)

9. $\left\{-4.25, -4\frac{7}{10}, -4\frac{3}{20}\right\}$

10. $\left\{-1.55, -1\frac{11}{100}, -1\frac{23}{25}\right\}$

21	Graph rational numbers in the coordinate plane	1-6)	Page :235

Identify the quadrant in which each point is located. (Example 1)

1. $\left(-1\frac{1}{2}, -2\frac{1}{4}\right)$

2. $\left(5\frac{3}{4}, -6\frac{1}{5}\right)$

3. $\left(\frac{4}{5}, 3\frac{3}{4}\right)$

4. $\left(-3\frac{1}{2}, 2\frac{4}{5}\right)$

5. Identify the axis on which the point $\left(-\frac{2}{3}, 0\right)$ is located. (Example 2)

6. Identify the axis on which the point $\left(0, 6\frac{3}{5}\right)$ is located. (Example 2)