أسئلة تدريبية على النسب والتناسب



تم تحميل هذا الملف من موقع المناهج الإماراتية	
موقع المناهج ⇦ المناهج الإماراتية ⇦ رياضيات ⇦ الفصل الأول ⇦ ملفات متنوعة ⇦ الملف	
تاريخ إضافة الملف على موقع المناهج: 13-11-2026 20:09:26	
ملفات ا كتب للمعلم ا كتب للطالب ا اختبارات الكترونية ا اختبارات ا حلول ا عروض بوربوينت ا أوراق عمل منهج انجليزي ا ملخصات وتقارير ا مذكرات وبنوك ا الامتحان النهائي ا للمدرس	المزيد من مادة رياضيات:
إعداد: Salem Amina	

التواصل الاجتماعي بحسب					
صفحة المناهج الإماراتية على فيسبوك					
المواد على تلغرام	التربية الاسلامية	اللغة العربية	اللغة الانجليزية	الرياضيات	

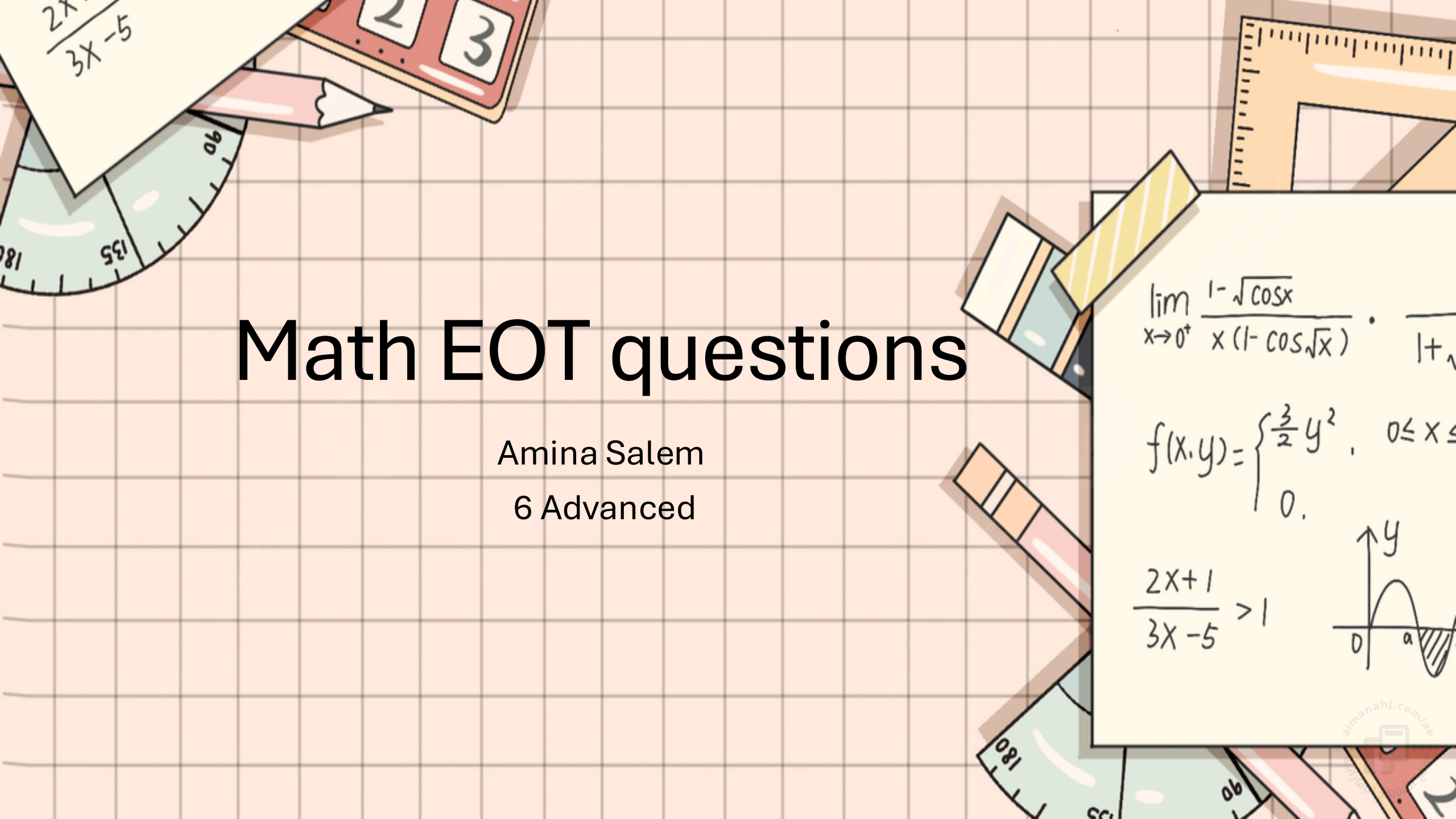
المزيد من الملفات بحسب والمادة رياضيات في الفصل الأول

تحميل تطبيق المناهج للهواتف الذكية	
تطبيق المناهج على App Store (آبل)	تطبيق المناهج على Play Google (أندرويد)

Math EOT questions

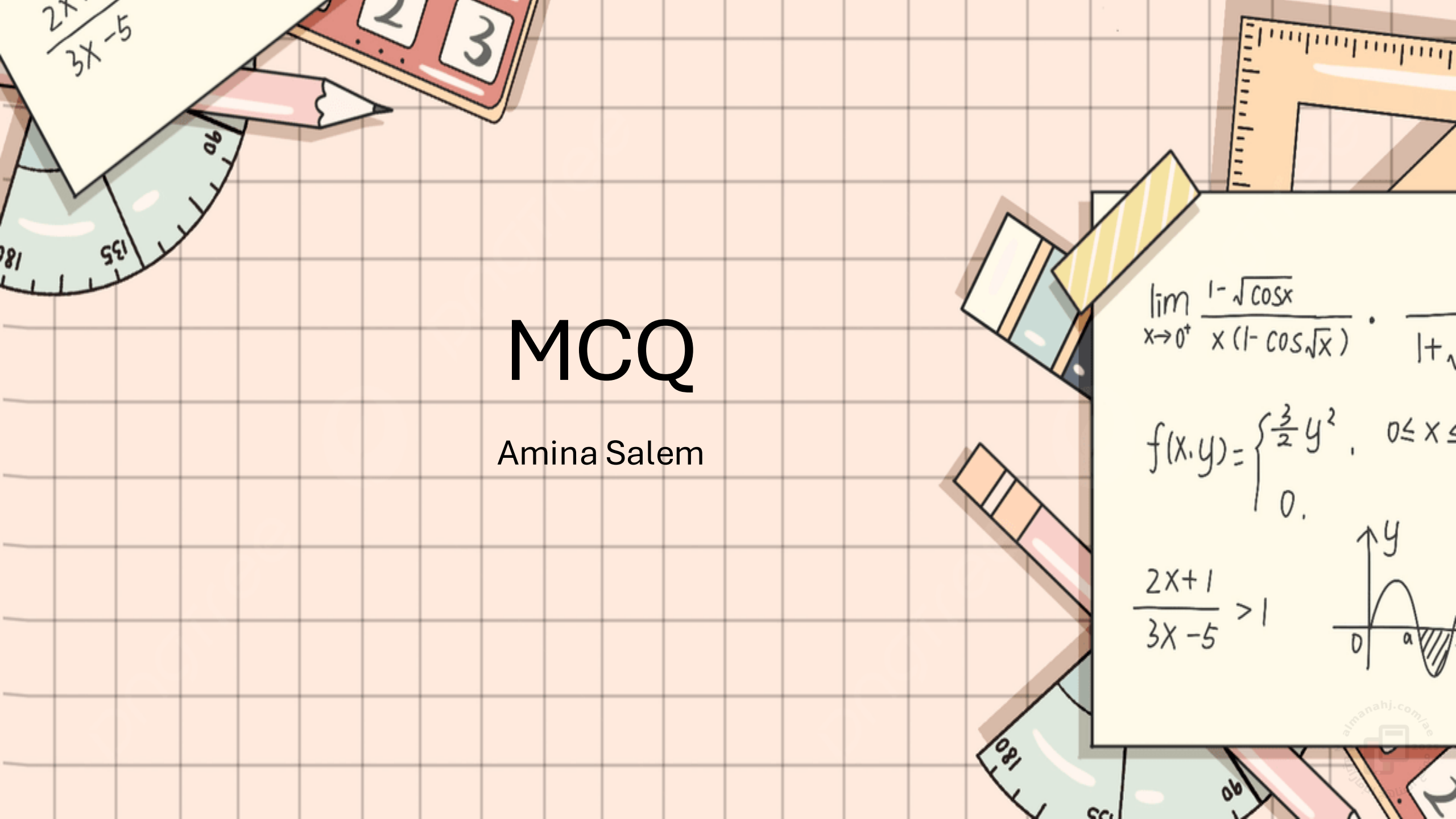
Amina Salem

6 Advanced



MCQ

Amina Salem



Q1	Show a ratio relationship between two quantities using different representations.	1-7	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)

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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

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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)

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Q1	Show a ratio relationship between two quantities using different representations.	1-7	11

Test Practice

7. **Open Response** A football coach needs to divide 48 players into two groups. He wants the ratio of players in Group 1 to players in Group 2 to be 1 to 3. How many players will be in Group 2?

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Q2	Show a ratio relationship between two quantities using tables of equivalent ratios and double number lines.	1-8	21

Use any strategy to solve each problem.

1. Jayden's snow cone machine makes 3 snow cones from 0.5 pound of ice. How many snow cones can be made with 5 pounds of ice? (Example 1)

2. Nyoko is having a pizza party. Two large pizzas serve 9 people. How many large pizzas should she order to serve 36 guests at the party? (Example 1)

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3. The world record for the most number of speed skips in 60 seconds is 332 skips. If the record holder skipped at a constant ratio of seconds to skips, how many skips did she make in 15 seconds? (Example 2)

4. A recipe for homemade clay calls for 6 cups of water for every 12 cups of flour. How many cups of water are needed when 4 cups of flour are used? (Example 2)

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5. Adrian decorated 16 cupcakes in 28 minutes. If he continues at this pace, how many minutes will it take him to decorate 56 cupcakes? (Example 3)

6. A comic book store is having a sale. You can buy 20 comic books for $35. What is the cost of 8 comic books during the sale? (Example 3)

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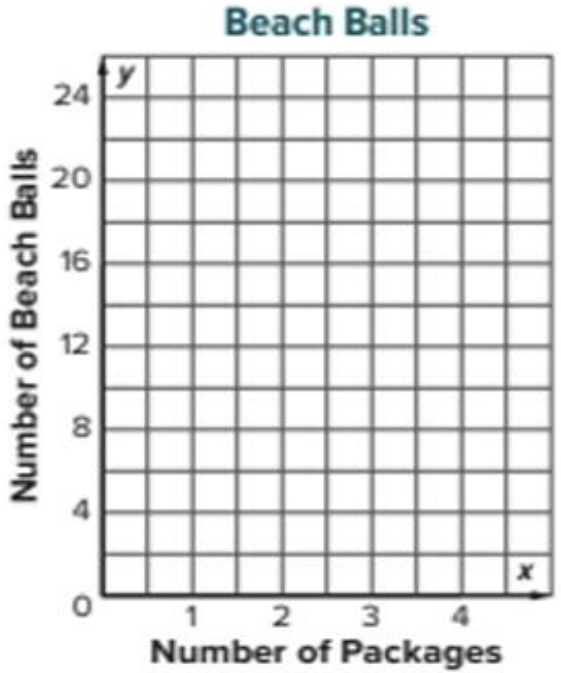
Test Practice

7. A certain store is selling packages of 10 pencils and 4 pens for back to school. The store manager wants to make a larger package in the same ratio. If the large package has 10 pens, how many pencils are in the large package? (Example 4)

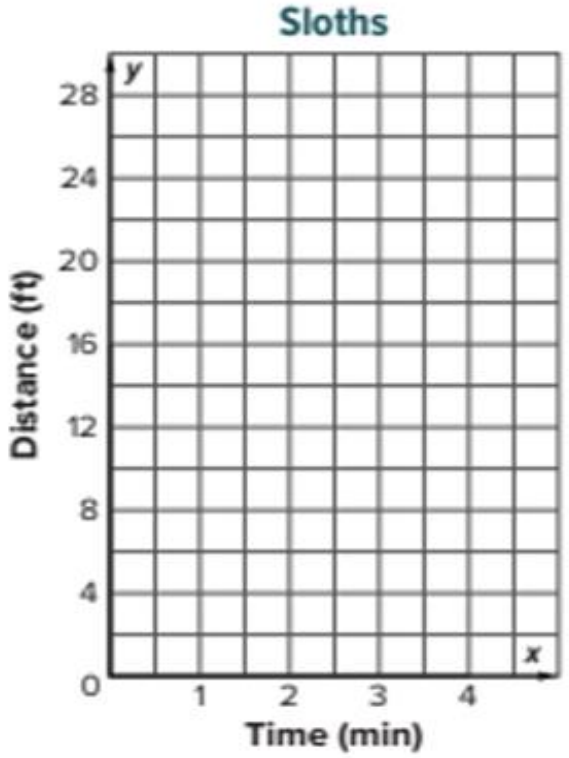
8. **Open Response** Ben made trail mix for his camping trip that contained 8 ounces of peanuts, 6 ounces of raisins, and 10 ounces of chocolate candies. He wants to make a larger batch for his next camping trip with 28 ounces of peanuts. How many ounces of raisins will he need?

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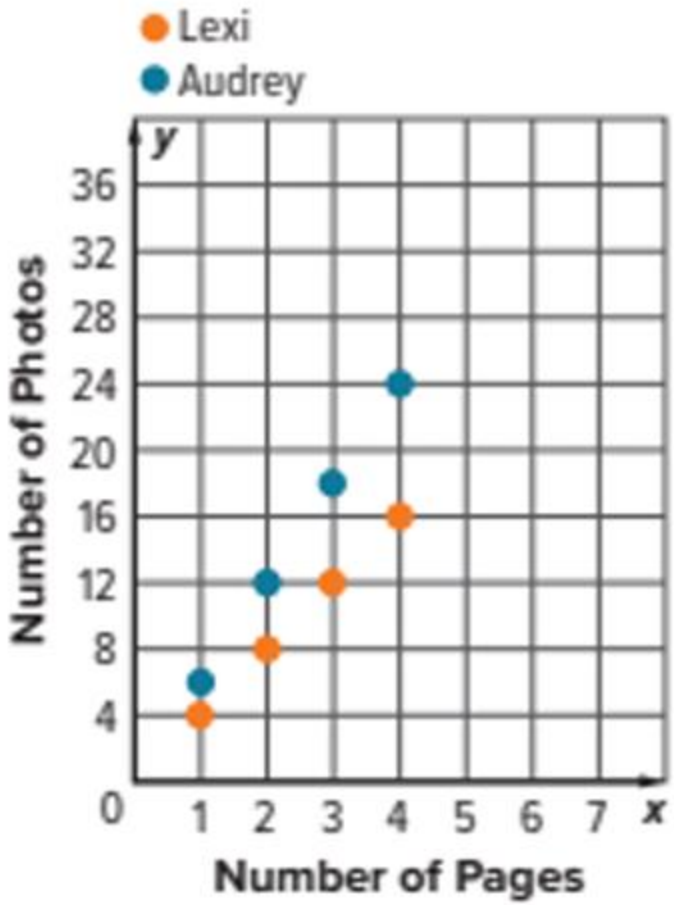
1. Lulah is buying beach balls for her beach themed party. Each package contains 6 beach balls. Generate the set of ordered pairs for the ratio relationship between the number of beach balls y and the number of packages x for a total of 1, 2, 3, and 4 packages. Then graph the relationship on the coordinate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



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)



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.

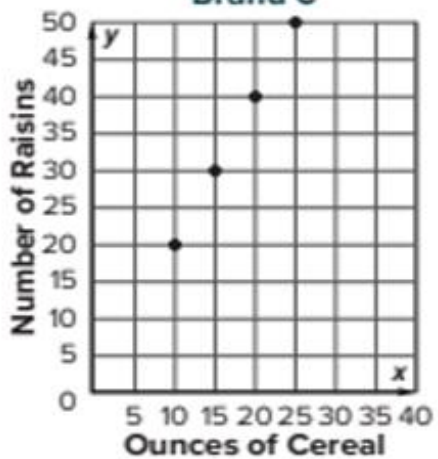


1. Cereal Brand A advertises that they have 60 raisins in their 24-ounce box of cereal. The advertised ratio of raisins to ounces for two other cereal brands are shown in the table and graph. Which brand advertises the greatest ratio of raisins to ounces of cereal? Justify your response. (Example 1)

Brand B

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

Brand C



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)			

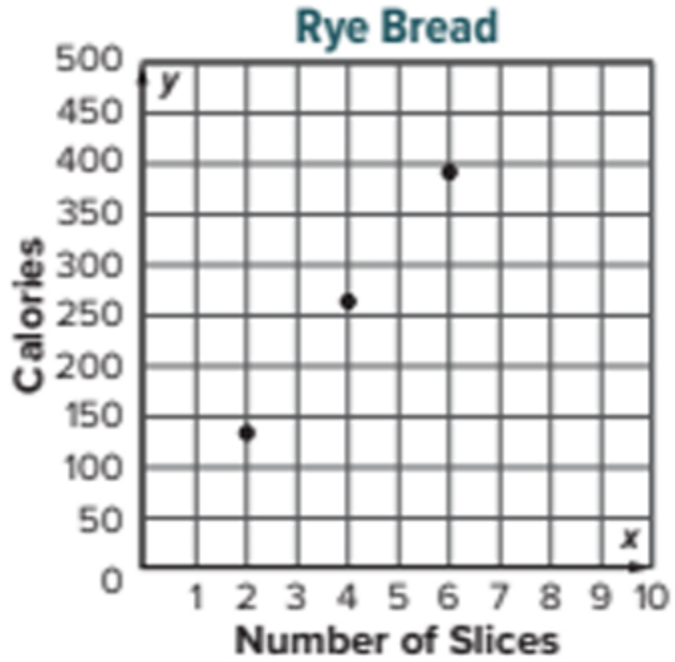
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Test Practice

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



Q5	Solve real-world problems involving ratio relationships by using bar diagrams, double number lines, and equivalent ratios.	1-8	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?

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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?

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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?

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Test Practice

7. In a survey, the ratio of students who prefer popcorn to potato chips is 3 to 4. If the number of students surveyed who prefer popcorn is 360, how many preferred potato chips?

8. **Open Response** In a neighborhood, the ratio of houses with swing sets to houses without swing sets is 3 to 5. If the number of houses with swing sets is 270, how many houses do not have swing sets?

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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?

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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?

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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?

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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?

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9. One quart of strawberries weighs about 2 pounds. About how many quarts of strawberries would weigh $\frac{1}{4}$ ton?

Test Practice

10. **Open Response** A mini fruit juice box contains 4 fluid ounces of juice. You need $2\frac{1}{2}$ quarts of fruit juice. How many mini fruit juice boxes will you need?

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)

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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)

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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)

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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

Test Practice

8. **Multiple Choice** Which of the following offers the least price per ounce of shampoo?

(A) $6 for 8 ounces of shampoo

(B) $4 for 5 ounces of shampoo

(C) $8 for 12 ounces of shampoo

(D) $12 for 16 ounces of shampoo

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Use any strategy to solve each problem.

1. Mr. Anderson is ordering pizzas for a class pizza party. Pizza Place has a special where he can buy 3 large pizzas for $18.75. At Mario's Pizzeria, he can buy 4 large pizzas for $22. If he needs to buy 12 pizzas, how much will he save if he buys the pizzas from Mario's Pizzeria instead of Pizza Place? (Example 1)

2. Skylar and Rodrigo each recorded how far they traveled while skateboarding. Skylar traveled 65 feet in 5 seconds and Rodrigo traveled 108 feet in 8 seconds. How much farther did Rodrigo travel per second than Skylar? (Example 1)

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3. Melissa is buying party favors to make gift bags. Supplies LTD sells a 5-pack of favors for $11.25 and Parties and More sells a 3-pack of favors for $8.25. At these rates, how much will she save if she buys 15 favors from Supplies LTD than Parties and More? (Example 1)

4. Tara can type 180 words in 4 minutes. At this rate, how many words can she type in 10 minutes? (Example 2)

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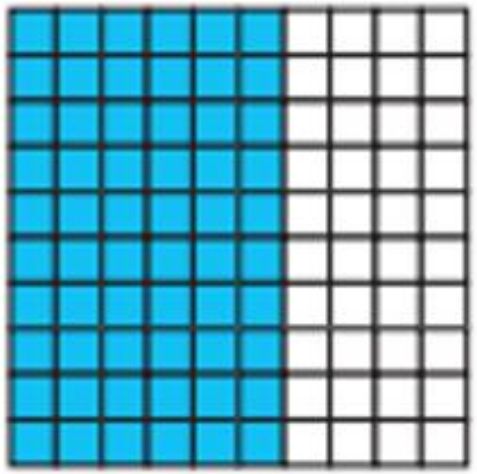
Q8	Solve real-world problems involving rates and unit rates by using bar diagrams, double number lines, and equivalent rates.	1-6	71

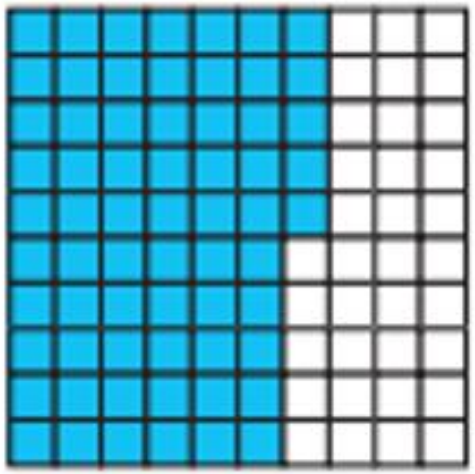
5. A bakery makes 260 donuts in 4 hours. At this rate, how many donuts can they make in 6 hours? (Example 2)

Test Practice

6. **Open Response** While jumping rope, Juan jumped 24 times in 30 seconds. At this rate, how many times will he jump in 50 seconds?

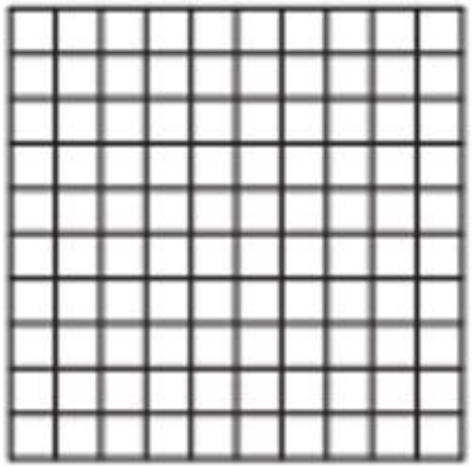
For Exercises 1 and 2, identify the percent represented by each 10 × 10 grid. (Example 1)

1.  _____

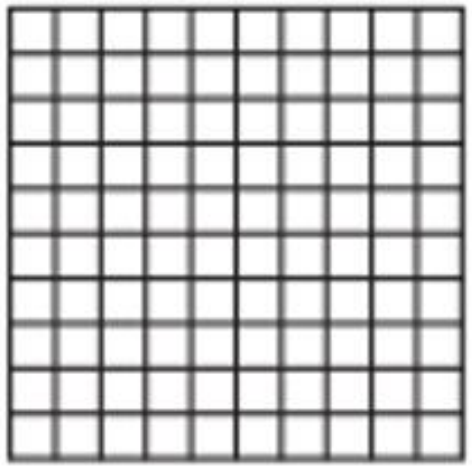
2.  _____

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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)



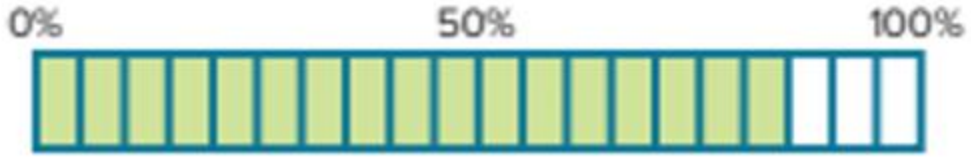
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For Exercises 5 and 6, identify the percent represented by each bar diagram. (Example 3)

5. _____



6. _____



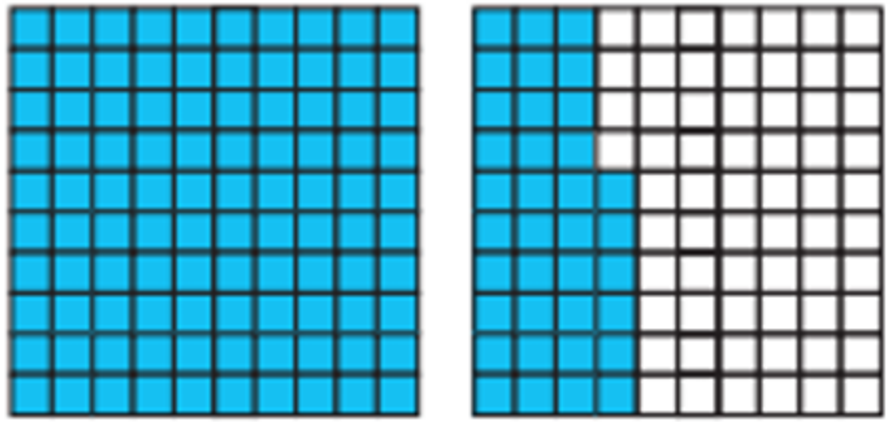
7. Shade the bar diagram to model 25%. (Example 4)

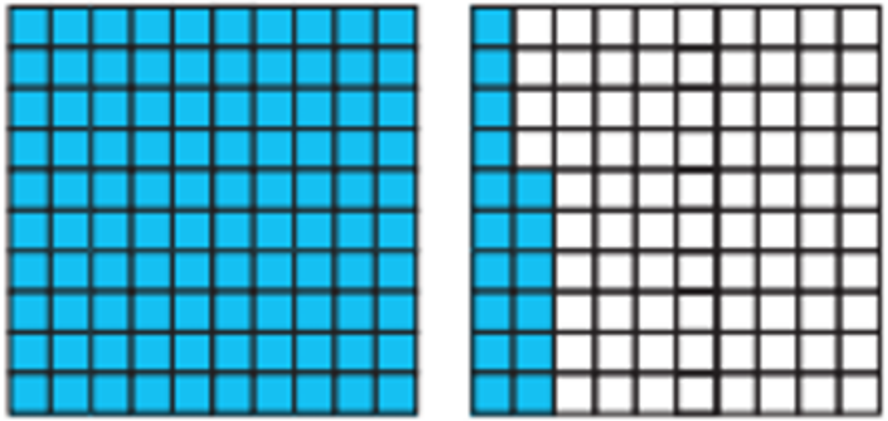


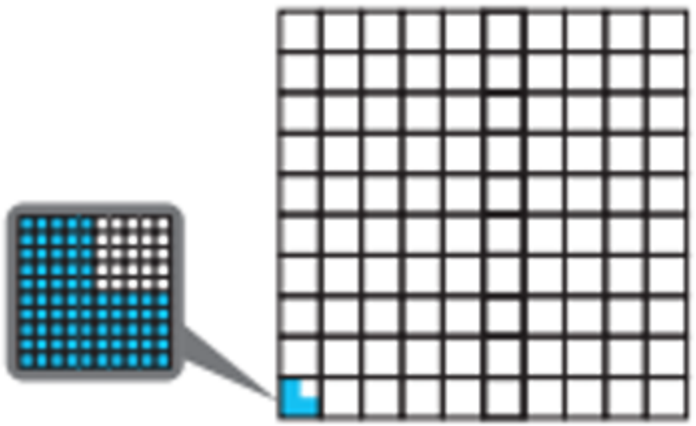
Test Practice

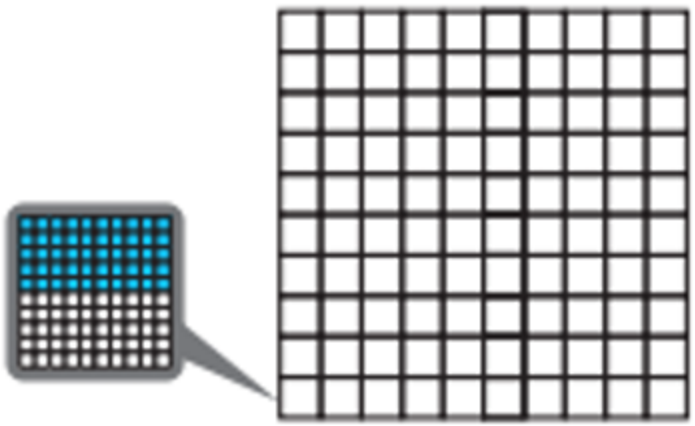
8. Open Response How can you use a bar diagram to model 45%?

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

1. 

2. 

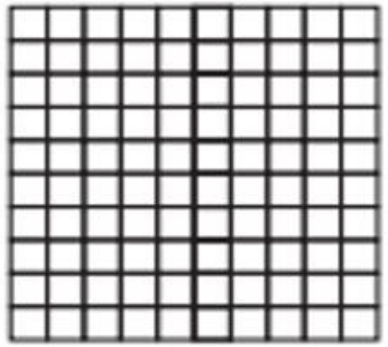
3. 

4. 

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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.



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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. $\frac{5}{8}$

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10. About 0.41 of Hawaii's total area is water. Write 0.41 as a fraction and as a percent.

11. Over the course of the basketball season, Zane's free throw average went up by 30%. Write 30% as a fraction and as a decimal.

12. There are 25 students in Muriel's class. Write a percent to represent the number of students that have brown eyes. Then write the percent as a fraction and as a decimal.

Eye Color	Number of Students
Blue	6
Brown	10
Green	7
Hazel	2

Test Practice

13. Multiselect Which of the following are equivalent to 85%? Select all that apply.

- ☐ 0.85
- ☐ $\frac{85}{100}$
- ☐ 0.8
- ☐ $\frac{17}{20}$
- ☐ 85

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Q13	Find the percent of a number by reasoning about percent as a rate per 100 and by using bar diagrams, ratio tables, equivalent ratios, and double number lines.	3-8	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 = _____

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For Exercises 1–11, estimate each percent. Show your estimation. (Examples 1 and 2)

1. 51% of 62 ≈ _____

2. 26% of 78 ≈ _____

3. 39% of 198 ≈ _____

4. 78% of 148 ≈ _____

5. 19% of 103 ≈ _____

6. 98% of 59 ≈ _____

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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?

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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?

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11. The table shows how the 515 students at West Middle School get to school. About how many of the students walk to school?

Method	Percent of Students
Bus	53%
Car	21%
Walk	26%

Test Practice

12. Open Response Carolyn's homeroom sold 207 magazine subscriptions. Of the magazine subscriptions sold, 28% were for fashion magazines. About how many fashion magazine subscriptions were sold?

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

1. Yolanda's club requires that 80% of the members be present for any vote. If at least 20 members must be present to have a vote, how many members does the club currently have?

2. Action movies make up 25% of Sara's DVD collection. If she has 16 action DVDs, how many DVDs does Sara have in her collection?

3. Marcus saved $10 because he bought a baseball glove that was on sale for 40% off. What was the original price of the baseball glove?

4. Of the students in the marching band, 55% plan to go to the school dance. If there are 110 students in the marching band that are going to the dance, how many students are in the marching band?

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5. Melcher used 24% of the memory card on his digital camera while taking pictures at a family reunion. If Melcher took 96 pictures at the family reunion, how many pictures can the memory card hold?

6. Mallorie has $12 in her wallet. If this is 20% of her monthly allowance, what is her monthly allowance?

7. The table shows the number of minutes Tim has for lunch and study hall. He calculates that these two periods account for 18% of the minutes he spends at school. How many minutes does he spend at school?

Period	Number of Minutes
Lunch	45
Study Hall	45

Test Practice

8. Open Response The number of sixth grade students accounts for 35% of the total number of students enrolled in middle school. There are 245 sixth grade students. How many students are enrolled in the middle school?

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 = _____

7. 6,750 ÷ 240 = _____

8. 4,415 ÷ 800 = _____

9. 5,777 ÷ 160 = _____

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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. $3.825 \div 0.25 =$ _____

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Find the reciprocal of each number. (Example 1 and Example 3)

1. $\frac{1}{2}$

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

3. 8

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)

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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)

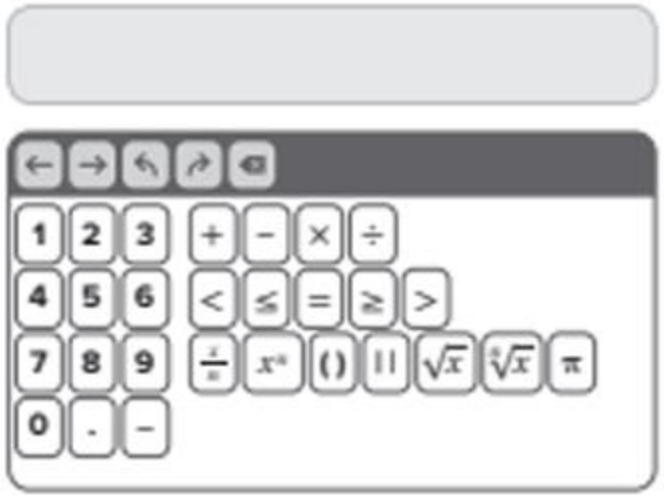
5. Chelsea has $\frac{7}{8}$ pound of butter to make icing. Each batch of icing needs $\frac{1}{4}$ pound of butter. Write and solve an equation that models the situation. Then interpret the quotient. (Example 2)

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6. Write a story context for $\frac{5}{6} \div \frac{1}{6}$. Then find the quotient. (Example 3)

Test Practice

7. **Equation Editor** What is the value of the expression $\frac{2}{5} \div \frac{1}{6}$?



1. The drama teacher is making bandanas for costumes. She is cutting $\frac{1}{2}$ yard of fabric into 6 bandanas of the same size. Write and solve an equation to find how much fabric there will be for each bandana. (Example 1)

2. A landscape designer has $\frac{4}{5}$ ton of mulch to divide equally among 8 customers. Write and solve an equation to find how much mulch each customer will receive. (Example 1)

Divide. Write in simplest form. (Examples 2 and 3)

3. $2\frac{4}{5} \div 4 =$ _____

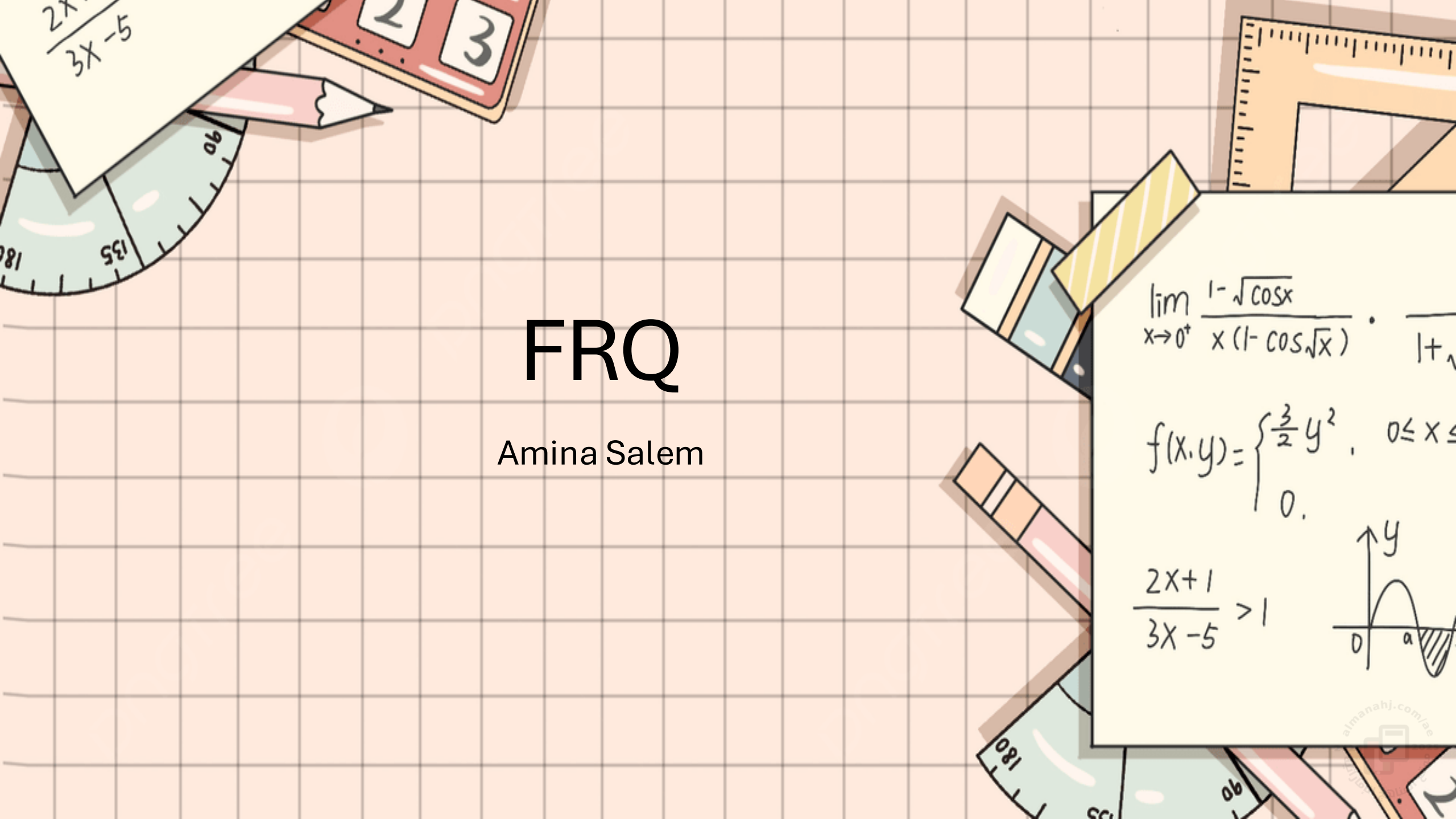
4. $6\frac{2}{3} \div 8 =$ _____

5. $4\frac{2}{3} \div 6 =$ _____

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FRQ

Amina Salem



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11. At the grocery store, Mr. Arnett allowed each of his children to fill their own bag with trail mix for their hike. The table shows the amount of trail mix for each child. The trail mix costs $4.50 per pound. How much will Mr. Arnett pay for all the trail mix?

Child	Amount of Trail Mix (oz)
Ava	15
Grayson	14
Mason	10
Tyler	17

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Q21	Use ratio reasoning to convert between customary units of measurement.	11-16	56

12. A hockey player needs to shoot a puck 55 meters from his current location to his opponent's goal to score a goal. After the shot, the puck is 120 centimeters from his opponent's goal. If there are 100 centimeters in 1 meter, how many meters did the puck travel?

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13. There are 60 minutes in one hour and 60 seconds in one minute. Using this information, explain how you could convert 20 miles per hour to feet per second.

14. **Identify Structure** When converting from larger units such as quarts to smaller units such as cups, will the number of smaller units be greater than the number of larger units? Explain your reasoning.

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15. The table shows the metric system conversions of length.

Larger Unit	→	Smaller Unit
1 kilometer (km)	=	1,000 meters (m)
1 meter	=	100 centimeters (cm)
1 centimeter	=	10 millimeters (mm)

How can you use ratio reasoning to find the number of centimeters in 2.2 kilometers?

16. MP **Find the Error** A student's work for converting 4 gallons to cups is shown. Find the mistake and correct it.

$$\frac{16 \text{ gallons}}{1 \text{ cup}} = \frac{4 \text{ gallons}}{d}$$

So, d is equal to $\frac{1}{4}$ cup.

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Q22	Solve real-world problems involving rates and unit rates by using bar diagrams, double number lines, and equivalent rates.	7-12	72

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7. Naomi can run 12 miles in 108 minutes. She is thinking about running in two different races, a 9-mile race and a 13-mile race. At her current rate, how many more minutes will it take her to complete the 13-mile race than the 9-mile race?

8. Leroy wants to buy a new racing bicycle that costs $168. To earn money, he can either do yardwork for his grandmother or babysit his brother and sister. He earns $24 for 3 hours of yardwork and he earns $48 for 4 hours of babysitting. How much longer will it take him to earn the money if he only does yardwork for his grandmother?

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9. Billie bikes 9 miles in 45 minutes. At this rate, can she bike 24 miles in 2 hours? Write an argument that can be used to justify your solution.

10. MP **Be Precise** Which method, using a double number line or using equivalent rates, do you prefer to use when solving rate problems? Explain.

11. MP **Persevere with Problems** A fruit stand is selling mandarin oranges for $6 for 4 pounds. A mandarin orange weighs about 2 ounces. There are 16 ounces in a pound. At this rate, how many mandarin oranges can you buy for $9?

12. Create Write and solve a real-world rate problem that can be solved by using a double number line.

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10. Students were asked which night they planned on going to the school festival. The results of the survey are shown in the table. If 18% of the students did not go on Friday, and 15% of the students did not go on Saturday, how many more students went on Friday than on Saturday?

Night	Number of Students
Friday	550
Saturday	480

11. Students were surveyed about which school athletic event they were planning to attend this week. Of the students who said they were going to the football game, 25% did not attend. Of the students who stated they were going to the volleyball game, 20% did not attend. How many more students went to the football game than the volleyball game?

Event	Number of Students
Football Game	120
Gymnastics Meet	95
Volleyball Game	80

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12. **Persevere with Problems** Olive is going to buy a scooter that costs $95. The sales tax rate is 8.5%. What is the total cost of the scooter including tax to the nearest cent?

13. **Justify Conclusions** Is 18% of 30 the same as 30% of 18? Justify your conclusion.

14. **Identify Structure** How can you find 40% of 150 using mental math? Explain.

15. **Be Precise** Explain how the part of a whole can be greater than the whole itself. Use an example.

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Q24	Find the whole, given the part and the percent by using bar diagrams, ratio tables, double number lines, and equivalent ratios.	9-12 7,11	128 132

Apply

9. Three different options for school lunch were offered on Friday. The table shows the percent of the total lunches sold for each option. If 270 students bought a cheese pizza or a pepperoni pizza, how many lunches were sold on Friday? If each lunch costs $3.50, how much money will the cafeteria earn from all of the lunches?

Option	Percent
Cheese Pizza	50
Pepperoni Pizza	40
Fried Chicken	10

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Q24	Find the whole, given the part and the percent by using bar diagrams, ratio tables, double number lines, and equivalent ratios.	9-12 7,11	128 132

10. The volleyball team is selling snack bags to raise money for new uniforms. The table shows the percent of the total bags sold for each type of snack bag. If they sold 210 bags of pretzels and cheese puffs, how many snack bags did they sell in all? If each snack bags costs $1.75, how much money did they raise?

Snack	Percent
Cheese Puffs	10
Corn Chips	15
Popcorn	25
Potato Chips	30
Pretzels	20

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Q24	Find the whole, given the part and the percent by using bar diagrams, ratio tables, double number lines, and equivalent ratios.	9-12 7,11	128 132

11. **Be Precise** Of the number of sixth grade students at a middle school, 120 prefer online magazines over print magazines. Of the number of seventh grade students, 140 prefer online magazines. A student said that this means a greater percent of seventh grade students prefer online magazines than sixth grade students. Is the student correct? Use precise mathematical language to explain your reasoning.

12. **Use Math Tools** In a photography club, about 48% of the members are girls. If there are 26 members who are girls, explain how you can use mental math to estimate the total number of people in the photography club?

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Q24	Find the whole, given the part and the percent by using bar diagrams, ratio tables, double number lines, and equivalent ratios.	9-12 7,11	128 132

7. **Open Response** A basketball player made 40% of the shots she attempted. If she made 32 baskets, how many shots did she attempt? (Lesson 6)

8. **Multiple Choice** A clothing store purchases a sweatshirt for $26 and adds $15 to set the sticker price. The store is having a sale where everything is on sale for 20% off. Choose the most reasonable estimate for the final price of a sweatshirt. (Lesson 5)

(A) $8.00

(B) $28.00

(C) $32.00

(D) $40.00

9. **Open Response** Three hundred students were surveyed about their favorite subject. The results are shown in the table below. How many more students prefer science than math? (Lesson 4)

Subject	Percent
Language Arts	15
Math	24
Science	33
Social Studies	21
Elective	7

Q24	Find the whole, given the part and the percent by using bar diagrams, ratio tables, double number lines, and equivalent ratios.	9-12 7,11	128 132

10. Open Response The original price of a DVD is $11. The sale price is 30% off the original price. What is the sale price of the DVD? (Lesson 4)

11. Open Response The table shows the percent of total items sold for each type of ball sold at a sports equipment store in one week. (Lesson 6)

Type of Ball	Percent
Baseball	25
Basketball	35
Football	20
Soccer Ball	15
Tennis Ball	5

A. If they sold a total of 450 baseball and tennis balls, how many total items did the store sell in one week?

B. If each item is sold for $10.95, how much did the store have in sales?

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6. $3\frac{3}{5} \div 1\frac{1}{2} =$ _____

7. $3\frac{3}{4} \div 1\frac{2}{3} =$ _____

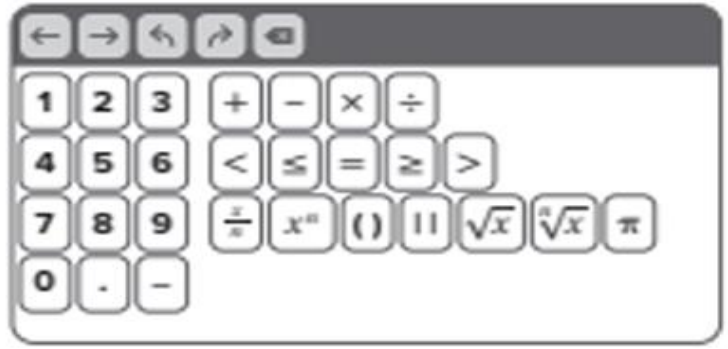
8. $4\frac{1}{2} \div 2\frac{7}{10} =$ _____

Test Practice

9. Jeanne has $3\frac{7}{8}$ yards of fabric. The table shows the amount of fabric she needs for different items. How many pairs of shorts can she make?

Clothing Item	Fabric Needed (yd)
Shirt	$1\frac{3}{4}$
Shorts	$1\frac{1}{4}$

10. **Equation Editor** What is the value of the expression $5\frac{5}{8} \div 3\frac{3}{4}$?




Good luck!