Al Huiteen school
Cycle – 2
EOT3 -Coverage

Mathematics

5th grade

Teacher :Alaa Elatawy

تعليم

T. Alaa Elatawy

Academic Year	2023/2024
العام الدراسي	
Term	3
الفصل	
Subject	Mathematics/Reveal
المادة	الرياضيات/ريفيل
Grade	5
الصف	
Stream	General
المسار	العام
Number of MCQ	15
عدد الأسئلة الموضوعية	
Marks of MCQ	4
درجة الأسئلة الموضوعية	
Number of FRQ	5
عدد الأسئلة المقالية	
Marks per FRQ	(7-9)
الدرجات للأسئلة المقالية	
Type of All Questions	الأسئلة الموضوعية/ MCQ
نوع كافة الأسئلة	الأسئلة المقالية/ FRQ
Maximum Overall Grade	100
الدرجة القصوى الممكنة	
Exam Duration - مدة الامتحان	150 minutes
Mode of Implementation- طريقة التطبيق	Paper-Based
Calculator	Not Allowed
الآلة الحاسبة	غير مسموحة

*	Questions might appear in a different order in the actual exam, or on the exam paper.
*	قد تظهر الأسئلة بترتيب مختلف في الامتحان الفعلي، أو على ورقة الامتحان .
**	As it appears in the textbook,and LMS.
**	كما وردت في كتاب الطالب وLMS .

مساعدة المديره
شمسه المزروعى

مديرة المدرسة
فوقيه مصطفى

Solve each problem. If there is a remainder, decide how to represent and interpret the remainder.

1. Grace walked the number of miles shown over the course of 7 days. She walked the same number of miles each day. How many miles did she walk each day?

2. There were 210 balloons at a fair. Each of the 50 children that attended the fair got the same number of balloons. How many balloons did each child get?

3. Dawn made 50 bracelets. She gave each of her 12 friends the same number of bracelets. How many bracelets did Dawn give to each of her friends?

Would you write the quotient for the problem with a remainder or as a mixed number?

4. Equal amounts of juice are poured into different glasses
   A. remainder
   B. mixed number

5. The same number of books must be put on each shelf.
   A. remainder
   B. mixed number

6. A dog is fed the same amount of food every day.
   A. remainder
   B. mixed number

7. Someone gives out the same number of flowers to each of 5 friends.
   A. remainder
   B. mixed number

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1	U11L2	a) Solve Problems Involving Division	(8-12)	Page :136

Solve each problem. If there is a remainder, decide how to represent and interpret the remainder.

8. A water cooler holds 80 cups of water. If 30 people each get an equal amount of water, how many cups of water does each person get?

9. A baker has this bag of flou . He puts equal amounts of flour in 4 canisters. How many pounds of flour are in each canister?

25 lb
Flour

10. Ryan has 320 pencils. He gives an equal number of pencils to each of 15 friends. How many pencils does he give each friend?

11. Rose has a piece of ribbon that is 150 inches long. She is cutting the ribbon into 20 equal pieces. How long will each piece be?

12. **Extend Your Thinking** Drew has 169 toy cars that he is organizing into boxes. Each box can hold 30 cars. How many boxes does he need?

1	U11L4	b) Divide Whole Numbers by Unit Fractions	(10,11)	Page :143

10. Keri is making trail mix that contains $\frac{1}{3}$ cup of sunflowe seeds per serving. How many servings can she make with this bag?

2 cups

11. A clock chimes every $\frac{1}{4}$ hour. How many times will the clock chime in 6 hours?

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1	U11L4	b) Divide Whole Numbers by Unit Fractions	(12-14)	Page :144

12. Mia hiked 4 miles. There were trail markers every $\frac{1}{10}$ mile. How many trail markers did Mia see during her hike?

13. STEM Connection Poppy is visiting a park that is 15 acres. The park is divided into sections that are each $\frac{1}{3}$ acre. How many sections does the park have?

14. Jaxon has 10 gallons of punch. He pours the punch into pitchers that each hold $\frac{1}{2}$ gallon. How many pitchers does Jaxon use?

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2	U11L5	a) Represent Division of Unit Fractions by Non-Zero Whole Numbers	(1-6)	Page :147

What is the quotient? Use a representation to solve.

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

   A. $\frac{1}{12}$

   B. $\frac{4}{3}$

   C. $\frac{1}{16}$

   D. $\frac{1}{7}$

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

   A. $\frac{1}{11}$

   B. $\frac{9}{2}$

   C. $\frac{1}{18}$

   D. $\frac{1}{20}$

3. $\frac{1}{8} \div 3 =$ _____

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

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

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

10. **Error Analysis** Peter buys $\frac{1}{4}$ pound of ham. Peter says that if he makes 2 ham sandwiches, each will have $\frac{1}{2}$ pound of ham. Is Peter correct? Explain why or why not.

11. Theo cuts this board into 4 equal sections. What is the length of each section?

$\frac{1}{4}$ ft

12. Sasha spends $\frac{1}{2}$ of each school day in math class, science class, and history class. If the time spent in each class is the same, what fraction of the school day does Sasha spend in math class?

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3	U12L3	Solve Multi-Step Problems Involving Measurement Units	(1-6)	Page :177

1. Adrian has a roll of wrapping paper that is 3 yards long. He uses $\frac{1}{3}$ of the wrapping paper to wrap a present. What is the length, in feet, of the paper left on the roll?

   A. 1 ft

   B. 3 ft

   C. 6 ft

2. Ruby's backpack has a mass of 4 kilograms. She removes a book that has a mass of 120 grams. What is the mass of Ruby's backpack after she removes the book?

   A. 2.8 kg

   B. 3.88 kg

   C. 38.8 kg

3. Amy's family has 2 gallons of milk in the refrigerator. At dinner, her family drinks $\frac{3}{8}$ of the milk in the refrigerator. How many cups of milk are left?

4. A track at the school is 400 meters long. Jackson walks around the track $3\frac{1}{2}$ times. How many kilometers did Jackson walk?

5. **STEM Connection** Finn knows that a cubic yard of concrete weighs about 4,050 pounds. A cement truck can hold 10 cubic yards of concrete. How many tons of concrete can the truck hold?

6. Robin is selling lemonade. She makes 3 liters of lemonade and sells glasses of 250 milliliters of lemonade each. In the first hou , she sells 6 glasses of lemonade. How many liters does she have left?

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7. Brian is walking to his friend's house that is 2.6 kilometers away. He stops when he is $\frac{7}{8}$ of the way there. How many meters does he still have to walk?

8. Nell is aiming to drink the amount of water shown per day. By 3 p.m., she is $\frac{3}{4}$ of the way to her goal. How many more fl id ounces does she need to drink to reach her goal?

8 cups per day

9. Tyler wants to send his cousin 5 books that are each 1,500 grams. He has a box that can hold up to 6 kilograms. Will Tyler be able to use the box he has? Explain.

10. Gina is growing a houseplant. When she measures it at the beginning of the month, it is 3 feet tall. When she measures it at the end of the month, it is $1\frac{1}{4}$ the size it was at the beginning of the month. How many inches did the houseplant grow?

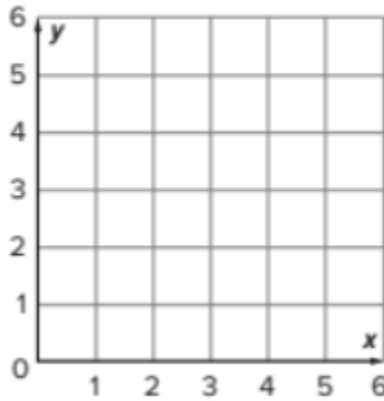**Plot and label the point for each place shown in the table.**

Place	Ordered Pair
Playground	(4, 6)
Post Office	(1, 2)
Fire Station	(5, 3)
Jill's House	(2, 4)

1. Playground

2. Post Offi

3. Fire Station

4. Jill's House
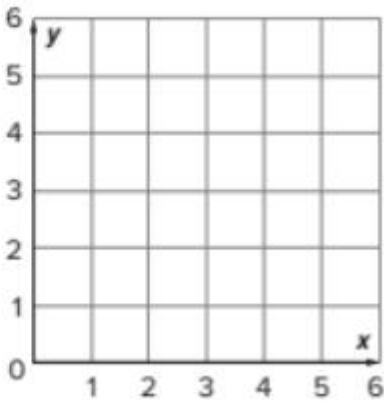
Plot and label the point for each ordered pair.

5. M(3, 2)

6. N(4, 3)

7. P(5, 4)

8. Q(1, 5)

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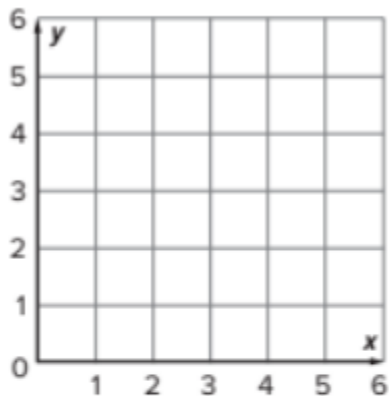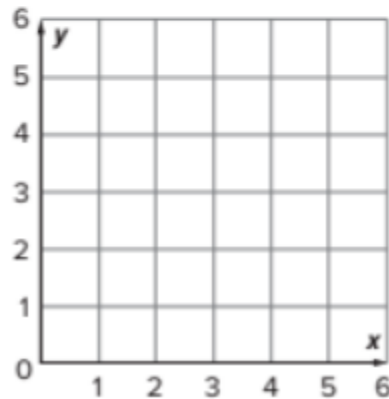
| 4 | U13L2 | Plot Ordered Pairs on the Coordinate Plane | (9-13) | Page :204 |

Plot and label the point for each ordered pair.

9. R(0, 0)

10. S(4, 0)

11. T(0, 6)

12. U(3, 5)

13. **Extend Your Thinking** Plot the points (1, 3), (1, 6), (5, 6), and (5, 3). Draw a line to connect the points in the order in which you plotted them. What is the length and width of the shape?

| 5 | U14L4 | Numerical Patterns | Learn | Page :246 |

Learn

Alex and Jenna participate in a sit-up challenge. They both do 0 sit-ups on the first day. Each day after the first day, Alex adds 2 sit-ups to the number she did the previous day and Jenna adds 6 sit-ups to the number she did the previous day.

How many sit-ups will Jenna do on the day that Alex does 20 sit-ups?

Use the information given for Exercises 1–8.

Quentin and Tyler are running laps on the school track. Each time they complete a lap, they do jumping jacks.

They both do 0 jumping jacks after the first la .

Each lap, Quentin adds 1 jumping jack to the number of jumping jacks he did after the lap before.

Each lap, Tyler adds 4 jumping jacks to the number of jumping jacks he did after the lap before.

1. What is the rule for Quentin's numerical pattern?

2. What is the rule for Tyler's numerical pattern?

3. Write the first 5 terms of Quenti 's numerical pattern.

4. Write the first 5 terms of yler's numerical pattern.

5. When Quentin does 4 jumping jacks after a lap, how many jumping jacks will Tyler do after that same lap?

6. What is a relationship between corresponding terms in the two numerical patterns?

7. How many jumping jacks will Tyler do after the lap when Quentin does 8 jumping jacks?

8. How many jumping jacks will Quentin do after the lap when Tyler does 40 jumping jacks?

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Use Numerical Patterns A and B for Exercises 9–12.

Numerical Pattern A: 0, 2, 4, 6, 8, 10, 12

Numerical Pattern B: 0, 6, 12, 18, 24, 30, 36

9. What is the rule for Pattern A?

10. What is the rule for Pattern B?

11. What is a relationship between the corresponding terms in the two numerical patterns?

12. When the number in Pattern A is 28, what will be the number in Pattern B?

4 درجات	الدرجات لكل سؤال	موضوعى/MCQ	Type of Questions		Part 2
Page :131		(2-7)	Relate Fractions to Division	U11L1	6

Complete the equation.

2. ___ ÷ ___ = $\frac{5}{9}$

3. ___ ÷ ___ = $\frac{13}{4}$

4. $3 \div 8 =$ ___

5. $7 \div 9 =$ ___

6. ___ $\times 7 = 7 \div 3$

7. $\frac{1}{4} \times 5 = 5 \div$ ___

6	U11L1	Relate Fractions to Division	(10-12)	Page :132

10. Aki pours the same amount of aquarium pebbles from this bag into each of 3 aquariums. What is the weight of the pebbles in each aquarium?

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11. What is the unknown divisor? Explain how you know.

$2 \div$ ___ $= \frac{2}{3}$

12. **Error Analysis** Spencer divides 6 pounds of food from the food drive into 3 boxes. He says each box has $\frac{3}{6}$ pounds of food. Is he right? How do you know?

7	U11L3	Represent Division of Whole Numbers by Unit Fractions	(1-8)	Page :139

What is the quotient? Use a representation to solve.

1. $6 \div \frac{1}{3} =$ ___

2. $9 \div \frac{1}{4} =$ ___

3. $7 \div \frac{1}{8} =$ _____

4. $5 \div \frac{1}{5} =$ _____

5. $4 \div \frac{1}{2} =$ _____

6. $2 \div \frac{1}{9} =$ _____

7. $4 \div \frac{1}{6} =$ _____

8. $3 \div \frac{1}{10} =$ _____

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7	U11L3	Represent Division of Whole Numbers by Unit Fractions	12	Page :160

12. Which equation can match the model? (Lesson 11-3)
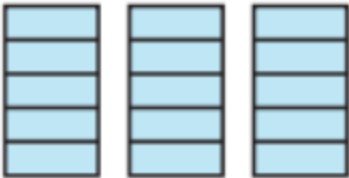
A. $5 \div 3 = n$

B. $3 \div \frac{1}{5} = n$

C. $5 \div \frac{1}{3} = n$

D. $3 \div 5 = n$

8	U11L4	Divide Whole Numbers by Unit Fractions	(1-9)	Page :143

What is the quotient?

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

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

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

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

5. $12 \div \frac{1}{3} =$ _____

6. $9 \div \frac{1}{5} =$ _____

7. $6 \div \frac{1}{6} =$ _____

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

9. $8 \div \frac{1}{7} =$ _____

8	U11L4	Divide Whole Numbers by Unit Fractions	(15-17)	Page :161

15. Which equation can be used to check the quotient of the division equation shown? (Lesson 11-4)

$$16 \div \frac{1}{4} = n$$

A. $4 \times \frac{1}{16} = \frac{1}{4}$

B. $4 \times 4 = 16$

C. $16 \times \frac{1}{4} = 4$

D. $64 \times \frac{1}{4} = 16$

16. Which expression has a whole-number quotient? (Lesson 11-4)

A. $9 \div \frac{1}{8}$ B. $9 \div 8$

C. $8 \div 9$ D. $\frac{1}{9} \div 8$

17. How many unit fractions of $\frac{1}{10}$ are in 100? (Lesson 11-4)

9	U11L7	Solve Problems Involving Fractions	(1-6)	Page :157

1. Sonya is making muffins. The recipe use $\frac{1}{2}$ cup of flour and makes 12 mini muffins. How many cups of flour should Son use to make 6 muffi ?

A. $\frac{1}{24}$ cup   B. $\frac{1}{4}$ cup   C. $\frac{1}{6}$ cup   D. $\frac{1}{12}$ cup

2. STEM Connection Saffron has 4 cups of chocolate chips. She has a muffin recipe that calls for $\frac{1}{8}$ cup of chocolate chips per muffin. How many muffins ca Saffron ma e?

3. Mr. Kline is making vegetable soup. His recipe makes 12 servings and uses $\frac{1}{3}$ pound of peas. How many pounds of peas does he need to make 6 servings?

A. $\frac{1}{36}$ pound   B. $\frac{1}{6}$ pound   C. $\frac{1}{4}$ pound   D. 4 pounds

4. Ms. Jorge is dividing 4 pounds of gardening soil equally for 5 potted plants. How many pounds of soil will be in each pot?

5. A zoo has 5 pounds of fruit and 3 pounds of lettuce to divide equally among 3 gorillas. How many total pounds of fruit and lettuce will each gorilla get?

6. A relay race is $\frac{1}{2}$ mile long. How far does each person run if there are 3 members on the team?

7. Shaun is making 3 bags of trail mix. He has $\frac{1}{5}$ pound of dried cranberries to divide equally among the bags. How many pounds of dried cranberries will be in each bag?

   A. $\frac{1}{15}$ pound   B. $\frac{3}{5}$ pound   C. $\frac{1}{3}$ pound   D. 15 pounds

8. Lucy brings 4 cakes to the bake sale. Each piece of cake is $\frac{1}{6}$ of the whole. How many pieces of cake does she have? Write and solve the equation.

9. Mike made 60 cookies. He divided the cookies equally among his 8 friends and kept the rest for himself. How many cookies did Mike give his friends, and how many did he keep?

10. Ingrid buys this piece of cheese. She uses equal amounts of it to make 3 sandwiches. How much cheese is on each sandwich?

$\frac{1}{4}$ lb

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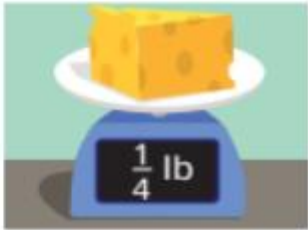
Which operation will you use for the conversion?
Explain your reasoning.

1. cups to fluid ounce

2. hours to days

Complete the conversion.

3. 36 in. = _____ ft

4. 2 T = _____ lb

5. 16 pt = _____ gal

6. 3 yr = _____ mo

7. 48 oz = _____ lb

8. 4 hr = _____ min

9. A basketball court is 84 feet long. How does 84 feet compare to 30 yards? Explain how you know.

10. James needs this much ribbon for an art project. How many inches of ribbon does he need?

$\frac{2}{3}$ ft

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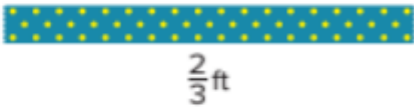
11. During a reading contest, Mike read for a total of 120 hours. How many days is equal to 120 hours?

12. Amy's dog weighs 272 ounces. How many pounds does her dog weigh?

7

13. Lauren goes for a walk that is $\frac{7}{8}$ mile long. How many feet did she walk?

14. STEM Connection Finn needs to cut a piece of wood that is 144 inches long. He thinks it would be easier to measure the piece of wood in yards. What is the length in yards? Explain your answer.

15. Extend Your Thinking A rope is 100 inches long. What is the length in feet and inches? Explain your reasoning.

11	U12L2	Convert Metric Units	(9,10)	Page :173

9. Andrew's height is given in centimeters. What is Andrew's height in meters?

142 cm
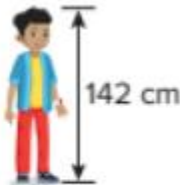
10. Error Analysis A cooler contains 50 liters of water. Emily calculated to determine how many milliliters of water are in the cooler. Check Emily's work. Did she make any mistakes? If so, how could she correct her work?

50 x 100 = 5,000

There are 5,000 milliliters of water.

11	U12L2	Convert Metric Units	(11-15)	Page :174

11. The maximum mass an elevator can hold is 450 kilograms. What is the maximum mass in grams?

12. How many liters of water are in the pool?

Capacity: 375 kL

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13. Ryan has a sheet of paper that is 0.75 meter long. What is the length in centimeters?

14. Ada's backpack has a mass of 9,080 grams. What is the mass in kilograms?

15. **Extend Your Thinking** Explain how you can determine how many millimeters are in a kilometer.

| 12 | U13L1 | Understand the Coordinate Plane | (1-7) | Page :199 |

Use the coordinate plane to answer exercises 1–7.

1. What ordered pair describes point W?

2. What ordered pair describes point X?

3. What ordered pair describes point Y?

4. What ordered pair describes point Z?

5. What ordered pair describes the origin?

6. How did you find the x-coordinate for each ordered pair?

7. How did you find the y-coordinate for each ordered pair?

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Charlie gave his friends these locations for a scavenger hunt. What are the ordered pairs that describe the locations on the coordinate plane?

8. Point A

9. Point B

10. Point C
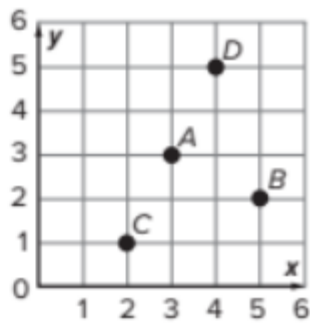
Learn

Aliyah is at the 30th floor of a building. While waiting for the elevator, she collected the data shown in the table.

How many minutes will it take the elevator to reach Aliyah's floor?

Time (min)	Floor
0	0
1	5
2	10
3	15
4	20

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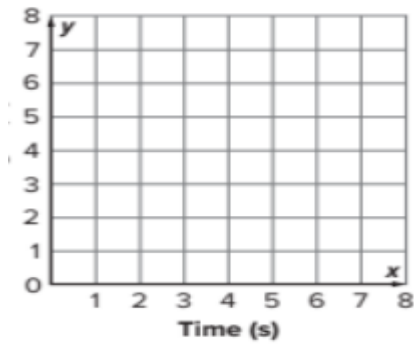
1. The table shows the time it took for a fifth-grade student to go down the slid at a park and their height from the ground while going down the slide. Write the time and corresponding heights as ordered pairs.

Time (seconds)	Height (feet)
0	7
1	5
2	4
3	3
4	2
5	1

2. Plot and connect the points on a coordinate plane.

Height (ft) vs Time (s)

3. How tall is the slide?

4. How long does it take for the student to go down the slide?

5. What happens between 0 seconds and 1 second?

6. Where is the student after 5 seconds?
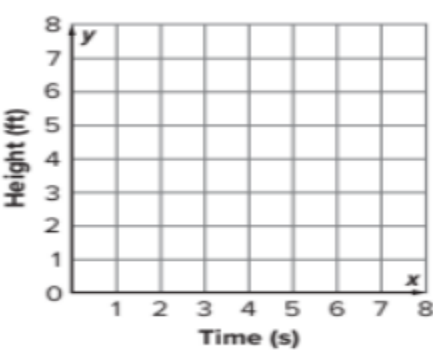
7. STEM Connection Poppy measures the height of a plant over several weeks and records it in the table. The plant is 14 inches tall before she begins recording. Write the weeks and corresponding heights as ordered pairs.

Week	Height (inches)
1	16
2	20
3	22
4	22
5	28
6	32

8. Plot and connect the points on the coordinate plane.

Height (in.) vs Week
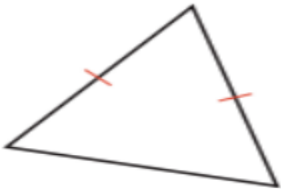
9. How much does the plant grow between Weeks 1 and 2?
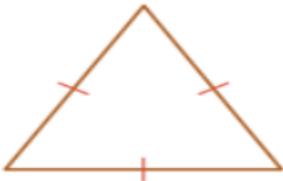
10. What happens between Weeks 3 and 4?
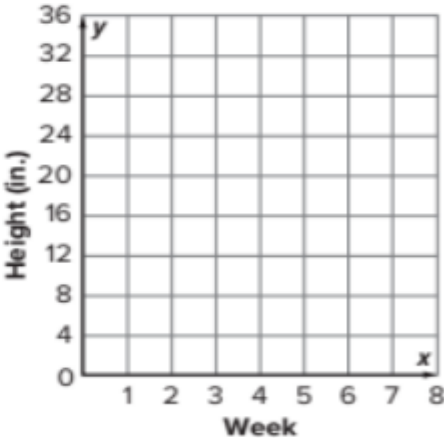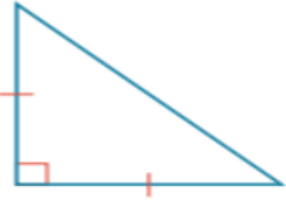
11. How much does the plant grow between before Poppy begins recording and Week 6?
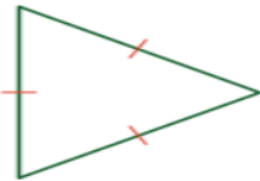
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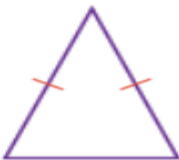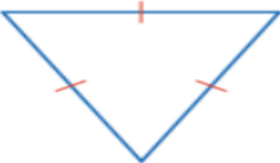**Classify each triangle by using their properties.**

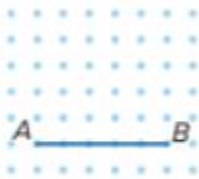1.

2.

3.

4.

5.

6.

7.

8.

9. What is a property of all triangles?

10. What is a property of scalene triangles?

11. What is a property of isosceles triangles?

12. What is a property of equilateral triangles?

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Learn

How many different kinds of quadrilaterals can you make with line segment **AB** as one of the sides?

You can identify quadrilaterals by their properties.

Classify each figure by using their properties.

1.

2.

3.

4.

5.

6.

7.

8.

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Use the figures for Exercises 1–8. Identify the figures that could be classified into each subcategory.

A

B

C

D

E

F

G

H

1. quadrilaterals

2. trapezoids

3. parallelograms

4. rectangles

5. rhombuses

6. squares

7. How did you know how to classify each shape? Explain.

8. Did you classify any shapes into more than one category? If so, explain why.

| 16 | U13L6 | Classify Quadrilaterals by Properties | (9-12) | Page :222 |

9. **STEM Connection** Hanna is helping cut some sheets of metal. She needs to cut them so that they have 4 sides with two pairs of parallel sides. Some need to have 4 right angles and some do not. How can she classify the sheets of metal?

10. Which quadrilaterals always have 4 right angles?

11. Which quadrilaterals always have exactly 1 pair of parallel sides?

12. Which quadrilaterals always have 4 sides of equal length?

| 17 | U14L1 | Write Numerical Expressions | (1-8) | Page :233 |

What numerical expression represents the description?

1. Divide 40 by 5. Then, subtract 2.

2. Multiply 4 and 8. Then, add 7.

3. Add $2\frac{1}{2}$ and $4\frac{2}{3}$. Then, subtract $\frac{1}{8}$.

4. Add 4.8 and 5.6. Then, subtract the sum from 16.9.

5. Subtract $4\frac{1}{4}$ from $10\frac{2}{5}$. Then, divide by 3.

6. Subtract 8 from 32. Then, divide 48 by the differenc .

7. Add 6.7 and 8.25. Then, multiply by 11.2.

8. Divide 24 by 6. Multiply 5 and 7. Then, add the quotient and the product.

10. What numerical expression represents *three more than seven*? (Lesson 14-1)

14. What expression represents *twelve less than eighteen*? (Lesson 14-1)

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21. What numerical expression represents *subtract eleven from twenty, then divide by three*? (Lesson 14-1)

23. What numerical expression represents *add three and six, then multiply by twenty*? (Lesson 14-1)

Learn

Two students evaluated $6 + (3 \times 8) \div 4$.

What might explain why their answers are different?

Which operation will you perform first to evaluate the expression? Explain your reasoning.

1. $25 - 5 \times (4 - 3)$

2. $37 + 8 \div 2 - 5$

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

4. $100 \times 4 + 6 - 10$

What is the solution? Show your work.

5. $3 + 7 \times 2 =$ _____

6. $(3 + 7) \times 2 =$ _____

7. $56 \div 8 - 3 + 2 \times 5 =$ _____

8. $56 \div (8 - 3 + 2) \times 5 =$ _____

9. $2\frac{3}{8} + 1\frac{1}{4} \times 6\frac{3}{4} - \frac{1}{2} =$ _____

10. $5.8 \times (6.75 + 3.25) \div 2 =$ _____

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11. Which numerical expression is equal to 8?

    A. $24 \div 6 \times 4 + 7$

    B. $(24 \div 6) \times 4 + 7$

    C. $24 \div (6 \times 4) + 7$

    D. $24 \div 6 \times (4 + 7)$

12. Which numerical expression is equal to 1?

    A. $96 \div 12 \times 4 \div 2$

    B. $96 \div (12 \times 4) \div 2$

    C. $96 \div (12 \times 4 \div 2)$

    D. $96 \div 12 \times (4 \div 2)$

Describe a relationship between corresponding terms in Patterns A and B.

1. Pattern A starts at 0 and adds 4 to each term.
   Pattern B starts at 0 and adds 2 to each term.

2. Pattern A starts at 0 and adds 3 to each term.
   Pattern B starts at 0 and adds 9 to each term.

3. Pattern A starts at 0 and adds 20 to each term.
   Pattern B starts at 0 and adds 5 to each term.

Use the table to answer Exercises 4–6.

4. Fill in the unknown terms in the table.

Pattern A +2	Pattern B +8
0	
2	
	16
8	

5. What is a relationship between the corresponding terms in Patterns A and B?

6. If a term in Pattern A is 20, what will be its corresponding term in Pattern B?

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7. Pattern A starts at 0 and adds 1 to each term. Pattern B starts at 0 and adds 6 to each term. If 5 is a term in Pattern A, what is its corresponding term in Pattern B?

8. Pattern A starts at 0 and adds 4 to each term. Pattern B starts at 0 and adds 8 to each term. If 24 is a term in Pattern A, what is its corresponding term in Pattern B?

9. Pattern A starts at 0 and adds 3 to each term. Pattern B starts at 0 and adds 12 to each term. If 72 is a term in Pattern B, what is its corresponding term in Pattern A?

10. **STEM Connection** Saffron is baking bread. She wrote these numerical patterns to record the amount of water and flour needed
Water (in cups): 3, 4, 5, 6, ...
Flour (in cups): 6, 8, 10, 12, ...
How many cups of water is needed when using 48 cups of flour

T. Alaa Elatawy