Name _____

Topic 1
Assessment

1. Choose all the numbers that round to 10,000 when rounded to the nearest ten thousand.

- ☐ 999
- ☐ 9,999
- ☐ 11,999
- ☐ 13,999
- ☐ 19,999

2. Which symbol makes the comparison true? Write $>$, $=$, or $<$ in the ◯.

443,292 ◯ 445,692

$<$ $>$ $=$

3. Write three numbers that round to 60,000 when rounded to the nearest ten thousand.

4. John wrote a number that has a 5 in the thousands place and a 6 in the tens place. Which could be John's number?

Ⓐ 65,207

Ⓑ 35,769

Ⓒ 53,421

Ⓓ 105,806

5. Look at the numbers in the table.

45,392
24,934
26,647

Which number has one digit that represents ten times the value of the digit to its right? Explain.

6. Write 20,033 in expanded form and using number names.

7. A. For each number, give the whole number that represents the value of the underlined digit. Write your answers in the boxes.

32<u>7</u>,486 ☐

7<u>7</u>0,351 ☐

698,<u>7</u>61 ☐

514,0<u>7</u>7 ☐

B. Look at your answers in **Part A**. In which number is the value of the underlined digit 10 times the value of the digit to the right of it?

Ⓐ 32<u>7</u>,486 Ⓒ 698,<u>7</u>61

Ⓑ 7<u>7</u>0,351 Ⓓ 514,0<u>7</u>7

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8. Rhode Island has about three hundred fifty-six thousand acres of forested land. What is this number in standard form rounded to the nearest ten thousand?

Ⓐ 360,000 Ⓒ 350,000

Ⓑ 400,000 Ⓓ 356,000

---

9. Which one of the following comparisons is correct?

Ⓐ $3{,}903 > 3{,}093$

Ⓑ $5{,}889 > 5{,}889$

Ⓒ $6{,}734 > 7{,}634$

Ⓓ $300{,}012 > 300{,}102$

---

10. Write $<$, $=$, or $>$ to complete a true comparison for each pair of numbers.

43,093 _____ 43,903

94,350 _____ 94,350

125,889 _____ 152,889

300,102 _____ 300,012

517,634 _____ 516,734

11. The table shows the number of people at the last four baseball games.

Baseball Game Attendance

Game	Number of People
1	45,753
2	42,250
3	43,160
4	41,779

A. Which of the 4 games had the least number of people? the greatest number of people? Write the number name for the number of people at each of these games.

B. Draw a place-value chart. Record the attendance for Game 2. Explain how the value of the 2 in the thousands place compares with the value of the 2 in the hundreds place.

Name _____

Topic **2**
Assessment

1. The table shows the number of people at the last three baseball games.

Baseball Game Attendance

Game	Number of People
1	5,753
2	2,250
3	3,160

A. Estimate the total attendance by rounding each number in the table to the nearest thousand and finding the sum.

B. Write and solve an equation to find the total attendance.

2. Find 3,000 − 2,450.

3. Enter the missing digits to complete the subtraction.

$$\begin{array}{r} 10,881 \\ -\ 4,960 \\ \hline \square 9 \square 1 \end{array}$$

4. Find the difference.

$$\begin{array}{r} 9,601 \\ -\ 939 \\ \hline \end{array}$$

Ⓐ 9,338

Ⓑ 1,932

Ⓒ 9,372

Ⓓ 8,662

5. Complete the equation to make it true. Write your answer in the box.

$(4{,}200 + 75) + 5 = \square + (75 + 5)$

6. Find the difference. Then use addition to check your work.

$$\begin{array}{r} 26,575 \\ -\ 17,088 \\ \hline \end{array}$$

7. Which of the following statements is true? Select all that apply.

- ☐ $61{,}640 + 1{,}111 = 62{,}751$
- ☐ $62{,}561 - 17{,}638 = 80{,}199$
- ☐ $15{,}020 + 8{,}604 = 23{,}660$
- ☐ $12{,}314 - 9{,}103 = 3{,}211$
- ☐ $22{,}222 - 11{,}111 = 11{,}111$

8. Find the sum.

$$\begin{array}{r} 7,236 \\ 5,957 \\ +\ 2,135 \\ \hline \end{array}$$

9. DuJuan used addition properties to rewrite the equation below. Select all the equations DuJuan might have written.

$3{,}010 + 2{,}370 + 1{,}505 = n$

- ☐ $3{,}010 + 1{,}505 + 2{,}370 = n$
- ☐ $3{,}010 + 1{,}505 = n$
- ☐ $3{,}000 + 2{,}300 + 1{,}500 = n$
- ☐ $(2{,}370 + 3{,}010) + 1{,}505 = n$
- ☐ $(3{,}000 + 2{,}300 + 1{,}500) + (10 + 70 + 5) = n$

10. Nikolas and Jayson recorded the number of miles each ran over two years.

Miles Ran

Year	Nikolas	Jayson
Last Year	1,362	1,948
This Year	1,982	1,013

A. Write and solve equations to find how many more total miles Nikolas and Jayson ran last year than this year.

B. Estimate how many more miles were run last year than this year by rounding each number in the table to the nearest hundred and solving the problem. Use the estimate to check if your answer to Part A is reasonable.

Name _____

Topic **3**
Assessment

1. Use numbers from the box to show how to multiply 217 by 4.

$$\begin{array}{r} 2\ 1\ 7 \\ \times \quad 4 \\ \hline \square \\ \square \\ + \ \square \\ \hline \square \end{array}$$

28	35
40	170
280	800
888	868

2. In each of 3 games last month, Julia's bowling score was 195. Explain how to use mental math to find the total score for Julia's 3 games.

3. Mrs. Wallingford sells trading cards in boxes of 30 and in boxes of 60. If she sells 5 boxes of 60 and 6 boxes of 30, how many trading cards did Mrs. Wallingford sell?

Ⓐ 40 trading cards

Ⓑ 480 trading cards

Ⓒ 500 trading cards

Ⓓ 4,800 trading cards

4. A. What are the partial products when finding 2,361 × 4? Select all that apply.

☐ 8,000 ☐ 4,600 ☐ 4

☐ 1,200 ☐ 2,000 ☐ 240

B. Find the product of 2,361 and 4.

5. The Bumblebee Bakery is taking orders for cupcakes. The cupcakes are sold in boxes.

Cupcakes	Number of Boxes
Strawberry Crème	37
Blackberry Bliss	72
Chocolate Delight	43
Surprise Assortment	17

A. There are 8 Blackberry Bliss cupcakes in each box. Write and solve an equation to find how many Blackberry Bliss cupcakes were ordered.

B. There are 8 cupcakes in each box of the Surprise Assortment. Draw an area model and show the partial products to find how many Surprise Assortment cupcakes were ordered.

6. Select all the expressions that could be used to find 327×9.

- ☐ $327 + 9$
- ☐ 9×327
- ☐ $9 \times (300 + 20 + 7)$
- ☐ $(9 \times 300) + (9 \times 20) + (9 \times 7)$
- ☐ $9 + (300 + 20 + 7)$

7. Draw a model to find 224×4.

$224 \times 4 =$ _____

8. Select all of the expressions that have a product of 920.

- ☐ $(9 \times 100) + (2 \times 10)$
- ☐ 9×120
- ☐ $(90 \times 2) \times 1$
- ☐ 115×8
- ☐ $(9 \times 100) \times (2 \times 10)$

9. The table shows the number of sandwiches sold in a busy deli in 1 month.

Type	Number
Chicken	230
Roast Beef	189
Ham	305
Turkey	267

A. If the same number of turkey sandwiches were sold for 4 months in a row, how many turkey sandwiches would be sold in all?

B. The deli sells 3 times as many tuna sandwiches in one month as roast beef. How many more tuna sandwiches were sold than roast beef in 5 months? Explain.

10. A store sells a 70-inch TV for $1,149 and a 50-inch TV for $487. Find the cost for three 70-inch TVs and three 50-inch TVs. Explain how you know your answer is reasonable.

11. Which expression has the same value as 3×156?

Ⓐ $(3 \times 1) + (3 \times 5) + (3 \times 6)$

Ⓑ $(3 \times 100) + (3 \times 50) + (3 \times 6)$

Ⓒ $(3 \times 100) + (3 \times 5) + (3 \times 6)$

Ⓓ $(3 \times 1) + (3 \times 50) + (3 \times 600)$

12. Which of the following is equivalent to $(700 \times 3) + (59 \times 3)$?

Ⓐ $759 \div 3$

Ⓑ 700×10

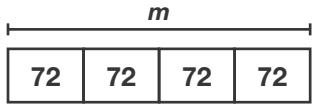
Ⓒ 759×3

Ⓓ $700 \times 3 + 59$

13. Find 4×256. Draw a bar diagram to solve.

14. Rudy's Pizza makes 317 pizzas and 54 subs every day. How many items are made in 3 days?

15. Write and solve an equation that represents the given bar diagram.



16. Which of the following is equivalent to 657? Select all that apply.

- ☐ 73×9
- ☐ $73 \div 9$
- ☐ 8×73
- ☐ 73×8
- ☐ 9×73

17. Mr. Brouard would like to purchase a laptop computer for each of his 2 daughters and 1 son. The computers each cost $387.

A. Mr. Brouard thinks the total cost should be about $1,100. Is this amount reasonable? Explain.

B. Write and solve an equation to find the total cost of the computers. Explain why your answer is reasonable.

18. What is the product of 4 × 1,817?

Ⓐ 768

Ⓑ 7,068

Ⓒ 7,228

Ⓓ 7,268

19. How can you use mental math to find the product of 5 × 790?

20. A. Select all the partial products for 7 × 532.

- ☐ 14
- ☐ 35
- ☐ 210
- ☐ 3,500
- ☐ 4,000

B. Find the product for **Part A** using the partial products.

Name _____

1. Mr. Luca bought 28 notebooks. Each notebook has 54 pages. What is a good way to estimate the total number of pages Mr. Luca bought?

Ⓐ 20×50 Ⓒ 30×50

Ⓑ 20×60 Ⓓ 28×60

2. Find the product 23×30. Show your work.

3. The product of two factors is 1,200. One of the factors is 20. What is the other factor?

Ⓐ 40 Ⓒ 60

Ⓑ 120 Ⓓ 600

4. Which two expressions are equal to 420?

- ☐ 42×10
- ☐ $40 \times 10 + 2$
- ☐ $40 \times 10 + 20 \times 10$
- ☐ $40 \times 10 + 2 \times 10$
- ☐ $20 \times 10 + 4 \times 10$

5. Nika has a contract and needs to make 37 beaded necklaces. She puts 42 beads in each necklace. Which is the best way to use rounding to estimate the number of beads Nika needs? What is the exact number of beads?

Ⓐ 37×40; 1,480 Ⓒ 40×40; 1,554

Ⓑ 40×42; 1,680 Ⓓ 45×45; 2,025

6. Graham swam 14 laps 12 times in May. He swam 15 laps 16 times in June.

A. Draw arrays or area models to find the number of laps Graham swam during the two months.

B. Write and solve equations to represent your arrays or area models.

7. Each box has 16 books packed. Use the numbers in the box to complete the table.

40
60
160
480
960

Number of Boxes	Number of Books
10	
30	
	640

8. A bakery has 12 bins of bagels. Each bin is filled with 37 bagels. Use properties of operations to find the total number of bagels. Use rounding to check if your answer is reasonable.

9. The lawn service charges $85 to mow, weed, and fertilize a lawn. How much did the lawn service earn if 15 lawns were tended in June and 23 lawns were tended in July? Write and solve equations.

10. Which of the following uses properties of operations to help find 49×21?

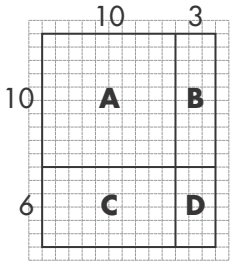
Ⓐ $4 \times 9 \times 2 \times 1$

Ⓑ $(40 + 9) \times (20 + 1)$

Ⓒ $49 + 21$

Ⓓ $40 \times 9 \times 20 \times 1$

11. Spencer drew an area model to find 16×13. Write the partial product for each rectangle in the area model.



A _____

B _____

C _____

D _____

12. One mural is 27 feet long and 12 feet wide. Another mural is 18 feet long and 10 feet wide. What is the difference between the areas of the two murals? Use equations to show your work.

_____ square feet

Name _____

Topic **5**
Assessment

1. Select all the equations that are reasonable estimates for the quotient $124 \div 6$.

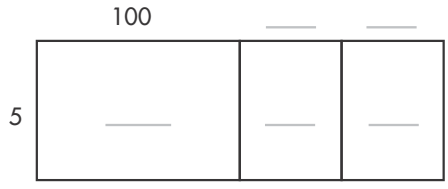
- ☐ $200 \div 5 = 40$
- ☐ $120 \div 6 = 20$
- ☐ $100 \div 5 = 20$
- ☐ $100 \div 6 = 10$
- ☐ $200 \div 4 = 50$

2. Draw a bar diagram for the equation, and then solve.
$2{,}400 \div 8 = b$

3. Mrs. Brooks has 2 pieces of ribbon to make wreaths. One piece is 18 yards long and the other is 17 yards long. Each wreath requires 5 yards of uncut ribbon. How many wreaths can Mrs. Brooks make? How do the remainders affect the number of wreaths she can make?

4. A. Write an equation to show how to divide 575 into 5 equal groups.

B. Complete the model to solve the equation in **A**.



5. What is the best estimate for $2{,}500 \div 6$?

- Ⓐ 600
- Ⓑ 400
- Ⓒ 800
- Ⓓ 200

6. Draw an array and solve the equation. $37 \div 8 = ?$

7. Use compatible numbers to estimate the quotient $330 \div 4$. Then find the exact answer.

8. Find $4{,}200 \div 6$ using a place-value strategy. What basic fact did you use?

9. Select all the equations in which the remainder is 3.

- ☐ $52 \div 6 = 8$ R?
- ☐ $351 \div 6 = 58$ R?
- ☐ $812 \div 9 = 90$ R?
- ☐ $1{,}348 \div 7 = 192$ R?
- ☐ $2{,}699 \div 8 = 337$ R?

10. Which of the following expressions does **NOT** have a remainder of 5?

Ⓐ $77 \div 9$

Ⓑ $113 \div 9$

Ⓒ $338 \div 9$

Ⓓ $822 \div 9$

11. Which of the following is **NOT** equivalent to $48 \div 4$?

Ⓐ $(40 + 8) \div 4$

Ⓑ $(40 \div 4) + (8 \div 4)$

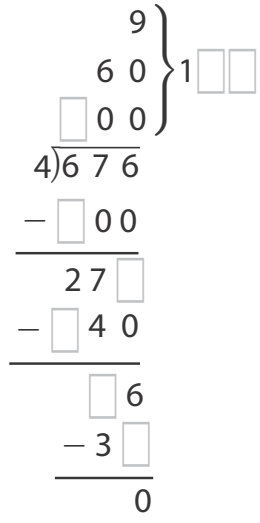
Ⓒ $(40 \div 4) + 8$

Ⓓ $(20 \div 4) + (28 \div 4)$

12. Select all the statements that are reasonable estimates for 331 ÷ 4.

- ☐ 160 ÷ 4
- ☐ 320 ÷ 4
- ☐ 360 ÷ 9
- ☐ 300 ÷ 3
- ☐ 360 ÷ 6

13. Use partial quotients to find the quotient. Choose numbers from the box to complete the calculations. Use each number once.



1	2
3	4
6	6
6	9

14. Find 1,800 ÷ 6. What basic fact did you use?

15. The fourth graders are going to the theater to watch the movie version of the book they all have read.

Group	Number of People
Mr. Blaine's Class	27
Mrs. Hatch's Class	28
Miss Rupert's Class	31
Mr. Lang's Class	29
Teachers and Chaperones	11

Each row seats 9 people. How many rows will be needed to seat everyone?

16. A. Divide.

312 ÷ 6 = _____

B. How can the answer to **A** help you easily find 3,120 ÷ 6?

17. The Comic Depot gives customers a free comic book when they purchase 9 comic books. How many free comic books can Marci get if she buys 68 comics? How does the remainder affect the number of free comic books she gets? How many more comic books does she need to buy to get her next free comic book?

18. Estimate 347 ÷ 6. Explain how you can use multiplication to estimate the quotient.

19. Use an equation to show how to share 144 into 6 equal groups. Explain how to check the answer using multiplication.

20. Write and solve an equation that shows one way to estimate 2,462 ÷ 5.

21. Draw a picture to explain why 567 ÷ 4 = 141 R3.

22. Match each equation with the correct missing number.

	7	6	2	1
3,___00 ÷ 4 = 800	❒	❒	❒	❒
805 ÷ ___ = 115	❒	❒	❒	❒
420 ÷ 7 = ___0	❒	❒	❒	❒
90 ÷ 8 = 1___R2	❒	❒	❒	❒

23. Mr. Draper uses 8 nails to secure each board of a fence. If there are 500 nails in a box, about how many boards will Mr. Draper be able to secure? Use compatible numbers to estimate the number of boards.

Name _____

Topic 6
Assessment

1. Jessica and her 2 sisters want to take a camping trip. They have $225 saved. Each of them will save $21 a week until they have at least $512 to pay for the trip. How much money will they save after 4 weeks? Will they have enough money to pay for the trip?

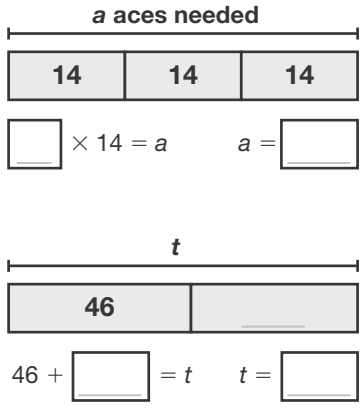
A. What are the hidden questions?

B. Write an equation that can be used to answer each hidden question. Then solve.

C. Write and solve an equation to find how much money they will save after 4 weeks. Will they have enough to pay for the trip? Explain.

2. Bree sold 2 paintings for $95 each, 5 stone sculptures for $64 each, and 1 mini-bronze sculpture for $150 in the month of April. Bree doubled her sales in May. How much were her total sales in April and May?

3. Ellie wants to beat the record for the most aces served in a tennis season. This season, she has served 46 aces. If she serves 14 aces at each match in the next 3 matches, she will break the record by 1 ace serve. How many total aces will she need to serve to break the record by 1 ace?



Ellie will break the record by 1 ace if she serves a total of _____ aces.

4. Select all the sentences that describe a comparison using multiplication.

- ☐ 25 is 5 more than *b*.
- ☐ 64 is 8 times as many as *w*.
- ☐ An ant can carry 50 times its own weight.
- ☐ There are 7 times as many balls as bats.
- ☐ Each adult ticket costs $5 more than a student ticket.

---

5. Choose the correct phrase from the box to complete each statement.

times as many as	more than

100 is 52 [ ] 48.

88 is 8 [ ] 11.

63 is 9 [ ] 7.

72 is 12 [ ] 60.

---

6. Mandi had $260 to spend at the jewelry expo. She already spent $125 and then bought 3 bracelets for $27 each. How much money does Mandi have left? Select each correct equation or set of equations that could be used to solve the question.

- ☐ $\$260 - \$125 = M; M - (3 \times \$27)$
- ☐ $\$260 - \$125 - (3 \times \$27) = M$
- ☐ $(3 \times \$27) - \$125 - \$270 = M$
- ☐ $(\$260 - \$125) - (3 \times \$27) = M$
- ☐ $\$260 + \$125 - (3 \times \$27) = M$

7. Bill ordered 5 boxes of blue markers and 6 boxes of red markers for the school's art department. He ordered a total of 66 markers. How many markers are in each box?

- Ⓐ 5
- Ⓑ 2
- Ⓒ 6
- Ⓓ 7

---

8. Select all of the sentences which are true for the number 8.

- ☐ $14 \times$ _____ $= 122$
- ☐ _____ times as many as 30 is 240.
- ☐ 360 is the product of _____ times 40.
- ☐ 534 is the product of _____ times 40.
- ☐ $16 \times$ _____ $= 128$

---

9. Select all the expressions that are equal to the product of 15 and 7.

- ☐ $7 \times (7 + 8)$
- ☐ 7 more than 15
- ☐ 7×15
- ☐ $7 + (5 + 10)$
- ☐ (5×10) more than 7

---

10. Sabrina jogged 54 laps around the football field. Harry ran 9 laps. How many times as many laps did Sabrina run than Harry?

- Ⓐ 3 times
- Ⓑ 6 times
- Ⓒ 8 times
- Ⓓ 9 times

Name _____

Topic **7**
Assessment

1. Margie has 64 rectangular steppingstones to arrange in an array in her backyard.

A. How many arrays can Margie make with the 64 steppingstones? List all the possible arrays.

B. How many factors are there for 64? Write them. What do you notice about the number of factors of 64 and the number of arrays Margie can make with the steppingstones?

C. Write all the factor pairs for 64. Is 64 prime or composite? Explain.

2. Determine whether the numbers in each list are **factors** or **multiples** of 12.

	Factors	Multiples
1, 12	❒	❒
2, 6	❒	❒
12, 24, 36	❒	❒
3, 4	❒	❒

3. Which statement is true?

Ⓐ The only factors of 4 are 4 and 1; therefore, 4 is composite.

Ⓑ The only factors of 7 are 7 and 1; therefore, 7 is prime.

Ⓒ The only factors of 16 are 16 and 16 and 1; therefore, 16 is prime.

Ⓓ The only factors of 31 are 31 and 1; therefore, 31 is composite.

4. Determine if each number is prime or composite. Then write all the factors for each number.
29, 51

5. Select all equations that have a dividend as a multiple of 2 and a quotient as a factor of 24.

- ☐ $42 \div 7 = 6$
- ☐ $40 \div 10 = 4$
- ☐ $32 \div 4 = 8$
- ☐ $24 \div 4 = 6$
- ☐ $10 \div 5 = 2$

6. Write 3 multiples and 3 factors for 12.

7. Write two multiples of 7 that have a factor of 5. Use equations to explain.

8. Select all the true statements.

- ☐ 51 is a composite number.
- ☐ 52 is a multiple of 13.
- ☐ 5 is a factor of 53.
- ☐ 54 has more than two factors.
- ☐ 55 is a prime number.
- ☐ One of the factors of 56 is an odd number.

9. Kurt says factors and multiples are related. Use the equation $8 \times 5 = 40$ to describe the relationship between factors and multiples.

10. Which lists all the factors of 36 that are also composite numbers?

Ⓐ 1, 36

Ⓑ 1, 2, 4, 6, 36

Ⓒ 4, 6, 9, 12, 18, 36

Ⓓ 1, 2, 3, 4, 6, 9, 12, 18, 36

11. Pete's Pastries sells cupcakes in packs of 4. A caterer needs between 42 and 50 cupcakes for dessert. Name two possible numbers between 42 and 50 that are multiples of 4. Explain.

12. Write the factors of 42 that are also prime numbers.

13. Jared says all even numbers less than 20 are composite. Find an even number less than 20 that is **NOT** composite. Explain why the number is not composite.

Name _____

Topic **8**
Assessment

1. Draw a model to show that $\frac{2}{3} = \frac{4}{6}$.

2. Emile will use less than $\frac{1}{2}$ cup sugar for a recipe. What fraction of a cup might Emile use? Explain.

3. Missy walks $\frac{1}{3}$ mile to school. Will says that Missy walks $\frac{2}{6}$ mile to school. Is Will correct? Explain.

4. Explain how to use multiplication to find an equivalent fraction for $\frac{1}{4}$.

5. Write two fractions that are equivalent to $\frac{8}{10}$. Describe how you can show they are equivalent.

6. Compare the fractions to $\frac{2}{3}$. Write each fraction in the correct answer space.

Less Than $\frac{2}{3}$	Equal to $\frac{2}{3}$	Greater Than $\frac{2}{3}$

$\frac{1}{2}$ $\frac{8}{12}$ $\frac{3}{8}$ $\frac{10}{15}$ $\frac{4}{5}$ $\frac{9}{10}$

7. Kenny ate $\frac{1}{8}$ of a large cake and Gail ate $\frac{2}{4}$ of a small cake. Who ate more? Explain.

Ⓐ The two cakes are different sizes, so it is impossible to compare the fractions to see who ate more.

Ⓑ Because $\frac{1}{8} < \frac{2}{4}$, Gail ate more.

Ⓒ Because Gail's cake was smaller than Kenny's cake, Kenny ate more.

Ⓓ Kenny and Gail ate the same amount because $\frac{1}{8}$ is the same as $\frac{2}{4}$.

8. The Nanduri family set a goal to walk a certain number of miles in May. After the first week, they checked in with each other to see how much of the goal each had completed.

Fraction Walked	
Mr. Nanduri	$\frac{1}{3}$
Mrs. Nanduri	$\frac{1}{4}$
Giva	$\frac{2}{5}$
Kanan	$\frac{3}{12}$

A. Who reached the greatest fraction of their goal?

B. Name the two family members who walked the same fraction of their goal. Explain.

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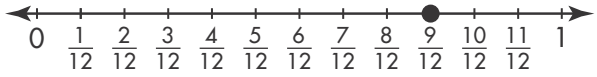
9. Lizzy found a fraction equivalent to the one shown on the number line. Which fraction could Lizzy have found? Explain.



Ⓐ $\frac{3}{4}$ because $\frac{9}{12} \div \frac{3}{3} = \frac{3}{4}$

Ⓑ $\frac{4}{10}$ because $\frac{9}{12} - \frac{5}{2} = \frac{4}{10}$

Ⓒ $\frac{3}{8}$ because $\frac{9}{12} \div \frac{3}{3} = \frac{3}{8}$

Ⓓ $\frac{1}{3}$ because $\frac{9}{12} \div \frac{4}{4} = \frac{1}{3}$

10. Jane and Richard each painted about $\frac{1}{5}$ of their own birdhouse. Jane painted more than Richard. Draw a picture and explain how that is possible.

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11. Order $\frac{4}{5}, \frac{1}{4}, \frac{6}{8}, \frac{5}{9}$ from least to greatest.

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12. Only one of the comparisons below is incorrect. Which is incorrect? What benchmark was used to check your answer?

Ⓐ $\frac{1}{4} < \frac{1}{3}$; I used $\frac{1}{2}$ as a benchmark.

Ⓑ $\frac{3}{8} > \frac{1}{4}$; I used $\frac{1}{2}$ as a benchmark.

Ⓒ $\frac{2}{3} = \frac{5}{6}$; I used $\frac{3}{4}$ as a benchmark.

Ⓓ $\frac{1}{3} < \frac{2}{5}$; I used $\frac{3}{5}$ as a benchmark.

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13. Use $\frac{1}{2}$ as a benchmark to compare $\frac{3}{8}$ and $\frac{4}{6}$.

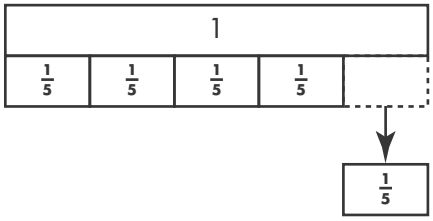
Name _____

Topic 9
Assessment

1. Match each expression on the left to an equivalent expression.

	$\frac{5}{12}+\frac{4}{12}$	$\frac{2}{12}+\frac{1}{12}$	$\frac{16}{12}-\frac{1}{12}$	$\frac{2}{12}+\frac{3}{12}+\frac{6}{12}$
$\frac{1}{12}+\frac{1}{12}+\frac{1}{12}$	❒	❒	❒	❒
$\frac{4}{12}+\frac{5}{12}$	❒	❒	❒	❒
$\frac{2}{12}+\frac{3}{12}+\frac{6}{12}$	❒	❒	❒	❒
$\frac{11}{12}+\frac{4}{12}$	❒	❒	❒	❒

2. On Friday, $\frac{1}{5}$ of the students in class were absent. What fraction of the students were **NOT** absent? Explain.



3. Cole spent some time working on his history homework. Then, he spent $\frac{5}{12}$ hour working on his Spanish homework. Cole spent 1 hour on homework. What fraction of an hour did Cole spend on history? Explain.

Ⓐ $\frac{2}{12}$ hour; because $\frac{5}{12}-\frac{3}{12}=\frac{2}{12}$

Ⓑ $\frac{5}{12}$ hour; because he spent the same amount of time on Spanish as he did History.

Ⓒ $\frac{7}{12}$ hour; because $\frac{12}{12}-\frac{5}{12}=\frac{7}{12}$

Ⓓ $\frac{12}{12}$ hour; because he spent an hour on homework

4. Select all the expressions that show a way to decompose $\frac{5}{10}$.

❒ $\frac{3}{10}+\frac{2}{10}$

❒ $\frac{1}{10}+\frac{1}{10}+\frac{3}{10}$

❒ $\frac{3}{4}+\frac{2}{6}$

❒ $\frac{4}{10}+\frac{1}{10}+\frac{1}{10}$

❒ $\frac{1}{10}+\frac{1}{10}+\frac{1}{10}+\frac{1}{10}+\frac{1}{10}$

5. Which equation is **NOT** true when $\frac{4}{10}$ is the missing number?

Ⓐ $\frac{3}{10}+\square=\frac{7}{10}$

Ⓑ $\frac{16}{10}-\square=1$

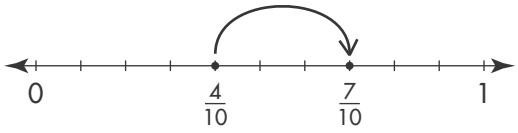
Ⓒ $1\frac{1}{10}-\square=\frac{7}{10}$

Ⓓ $1\frac{5}{10}-\square=1\frac{1}{10}$

6. Claire had $4\frac{1}{6}$ feet of string. She used some string to hang party decorations. Now she has $1\frac{5}{6}$ feet of string left. How much string did Claire use? Draw a model and solve.

7. Tammi and Orlando each decomposed $1\frac{3}{4}$. Tammi wrote $\frac{2}{4}+\frac{2}{4}+\frac{3}{4}$. Orlando wrote $\frac{4}{4}+\frac{3}{4}$. Who was correct? Explain.

8. The number line shows which of the following equations?



Ⓐ $0+\frac{4}{10}=\frac{4}{10}$

Ⓑ $\frac{4}{10}+\frac{3}{10}=\frac{7}{10}$

Ⓒ $\frac{7}{10}-\frac{4}{10}=\frac{3}{10}$

Ⓓ $\frac{10}{10}-\frac{7}{10}=\frac{3}{10}$

9. Jean and Ricky used fraction strips to add. What is the sum of $2\frac{5}{6}+1\frac{2}{6}$? Select all that apply.

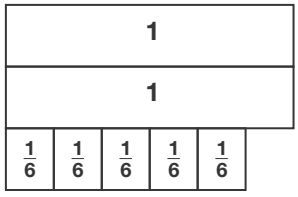
☐ $2\frac{5}{6}+1\frac{2}{6}=4\frac{1}{6}$

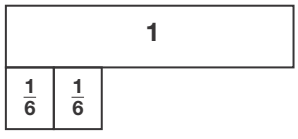
☐ $\frac{17}{6}+\frac{8}{6}=\frac{25}{6}$

☐ $\frac{5}{6}+\frac{2}{6}=\frac{7}{6}$

☐ $2\frac{5}{6}+1\frac{2}{6}=3\frac{7}{6}$

☐ $2\frac{5}{6}+1\frac{2}{6}=3$





10. Grandma Meyer uses the recipe to make a soup.

Soup Recipe

Ingredient	Quantity
Chicken broth	$2\frac{3}{4}$ cups
Water	$1\frac{2}{4}$ cups
Cream	$1\frac{1}{4}$ cups
Vegetable stock	$2\frac{3}{4}$ cups

A. Draw a bar diagram to find how much vegetable stock and cream are needed.

B. Find how many cups of soup will be made with all the ingredients. Explain your work.

