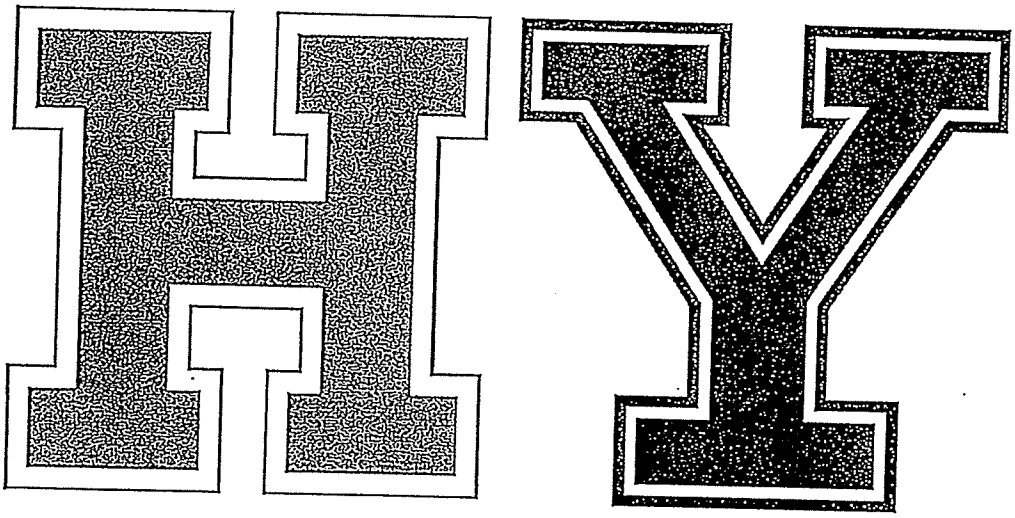
3rd Grade

Zearn Notes

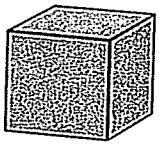


Module 3

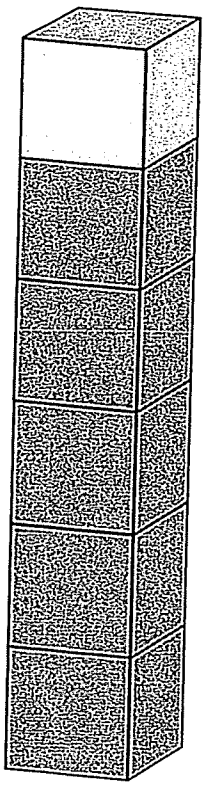
Lesson 2 G:3 M:3	Super Five to the Rescue
	ZEARN STUDENT NOTES

Name:_____ Date:_____

Complete: ☐ Class:_____

1 Each  has a value of 8.

Unit form: 6 eights = _____ eights + _____ eight



= 40 + _____

= _____

Facts: _____ × _____ = _____

_____ × _____ = _____

EXTRA WORKSPACE

Lesson 3 G:3 M:3	Math A through Z
	ZEARN STUDENT NOTES

Name:_____ Date:_____

Complete: ☐ Class:_____

1 Twenty-one students are grouped in threes to go on a field trip.

How many groups of students are there?

TAPE DIAGRAM

_____ × _____ = _____

_____ ÷ _____ = _____

There are _____ groups of students.

EXTRA WORKSPACE

Lesson 5 G:3 M:3	Skip from 7 to 10
	ZEARN STUDENT NOTES

Name:_____ Date:_____

Complete: ☐ Class:_____

1 Make ten using number bonds to skip-count by seven.

$0 + 7 = 7$

$7 + 7 = 14$

3 4

$14 + 7 =$ _____

_____ _____

$21 + 7 =$ _____

_____ _____

$28 + 7 =$ _____

_____ + 7 = _____

_____ + 7 = _____

_____ + 7 = _____

_____ + 7 = _____

_____ + 7 = _____

EXTRA WORKSPACE

Lesson 7 G:3 M:3	Savvy Sixes and Sevens
	ZEARN STUDENT NOTES

Name:_____ Date:_____

Complete: ☐ Class:_____

1 Ella sees 7 beetles when she weeds her garden. Each beetle has 6 legs.

How many legs are there on all 7 beetles?

DRAW

SOLVE

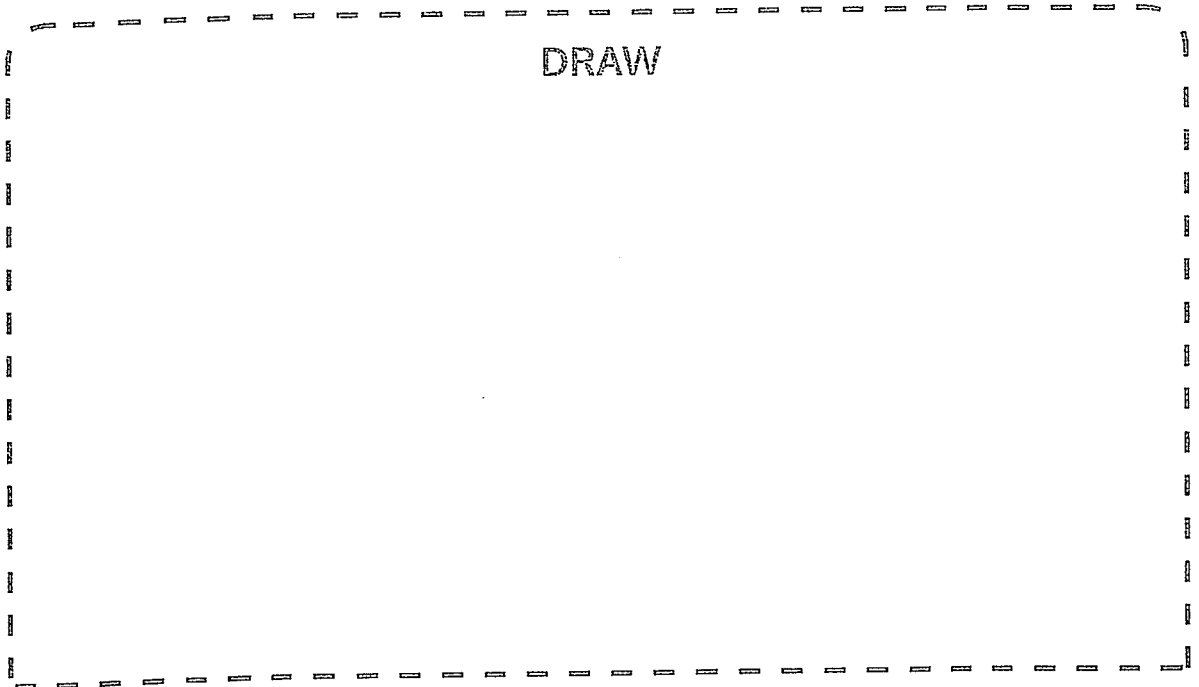
There are _____ legs on 7 beetles.

2

Each student gets 6 pencils. There are a total of 54 pencils.

How many students are there?

DRAW



SOLVE

There are _____ students.

Lesson 11 G:3 M:3	Figure Out Eights
	ZEARN STUDENT NOTES

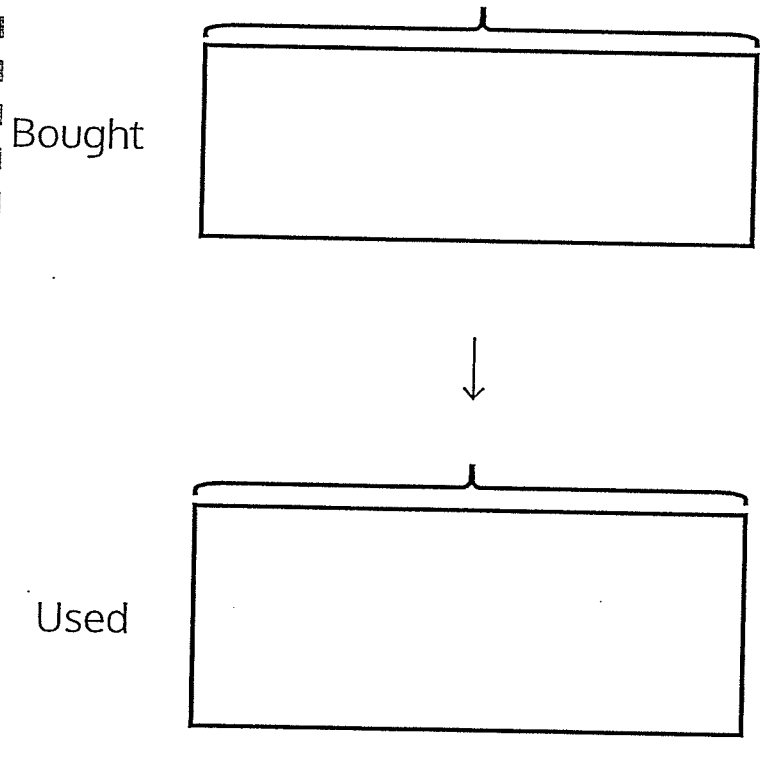
Name:_____ Date:_____

Complete: ☐ Class:_____

1 Asmir buys 8 boxes of 9 candles for his dad's birthday. After putting some candles on the cake, there are 28 candles left.

How many candles does Asmir use?

DRAW



SOLVE

Asmir uses _____ candles.

EXTRA WORKSPACE

Lesson 15 G:3 M:3	Riddle Me Nines
	ZEARN STUDENT NOTES

Name:_____ Date:_____

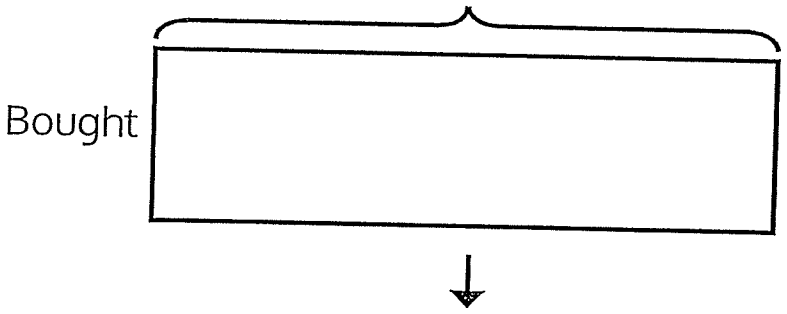
Complete: ☐ Class:_____

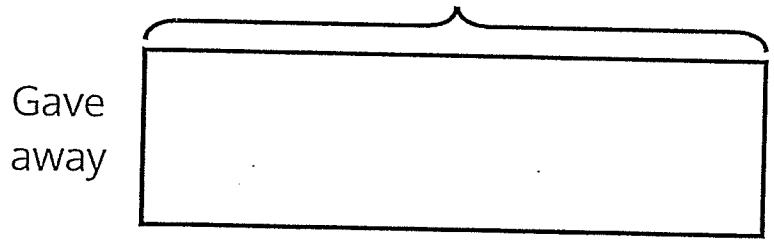
1 Ada buys 9 packs of highlighters with 4 in each pack. After giving 1 highlighter to each classmate, she has 17 left.

How many highlighters did Ada give away?

DRAW

SOLVE





Ada gave away _____ highlighters.

Eliza finds a bag of 72 marbles and runs to share them with 8 of her friends. She's so excited that she drops the bag and loses 18 marbles.

How many marbles will Eliza and each of her friends get?

DRAW

SOLVE

Eliza and each friend get _____ marbles.

Lesson 16 G:3 M:3	Big and Small
	ZEARN STUDENT NOTES

Name:_____ Date:_____

Complete: ☐ Class:_____

1. Draw 3 large circles. Draw 4 dots in each circle.

YOUR DRAWING

2. What division fact is related to $1 \times n = n$?

_____ ÷ _____ = _____

Multiplying and dividing by 1

_____ × _____ = _____ _____ ÷ _____ = _____

Draw 2 large circles. Draw 3 dots in each circle.

YOUR DRAWING

EXTRA WORKSPACE

Lesson 18 G:3 M:3	Sensible Solutions
	ZEARN STUDENT NOTES

Name:_____ Date:_____

Complete: ☐ Class:_____

1 Joe has $173 in the bank. He earns the same amount of money each week for 7 weeks and puts this money in the bank. Now, Joe has $208 in the bank.

How much money does Joe earn each week?

DRAW

SOLVE

Joe earns _____ each week.

EXTRA WORKSPACE

Lesson 21 G:3 M:3	Tackle the Tens
	ZEARN STUDENT NOTES

Name:_____ Date:_____

Complete: ☐ Class:_____

1 Benny earns $5 per week for his allowance.

If he saves his money for 20 weeks, how much more will Benny need to buy a bike that costs $108?

DRAW

hundreds	tens	ones

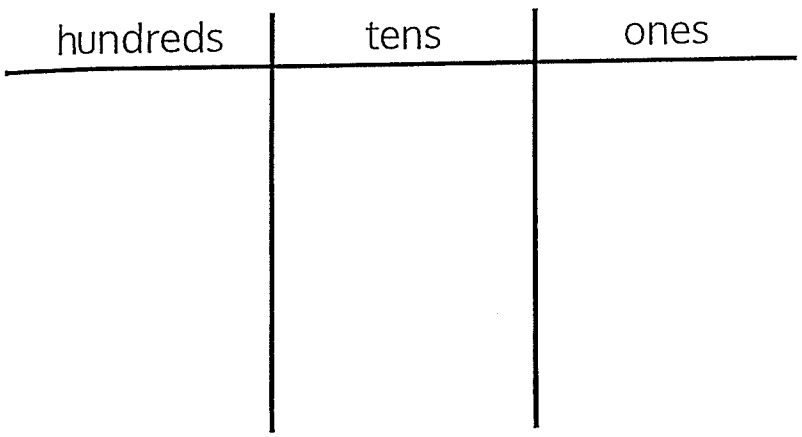
SOLVE

Benny needs $ _____ more to buy the bike.

2 Each day, Andrea does 25 squats to warm up for gymnastics practice and 15 squats to cool down after practice.

How many squats does she do in all if she practices Monday through Friday?

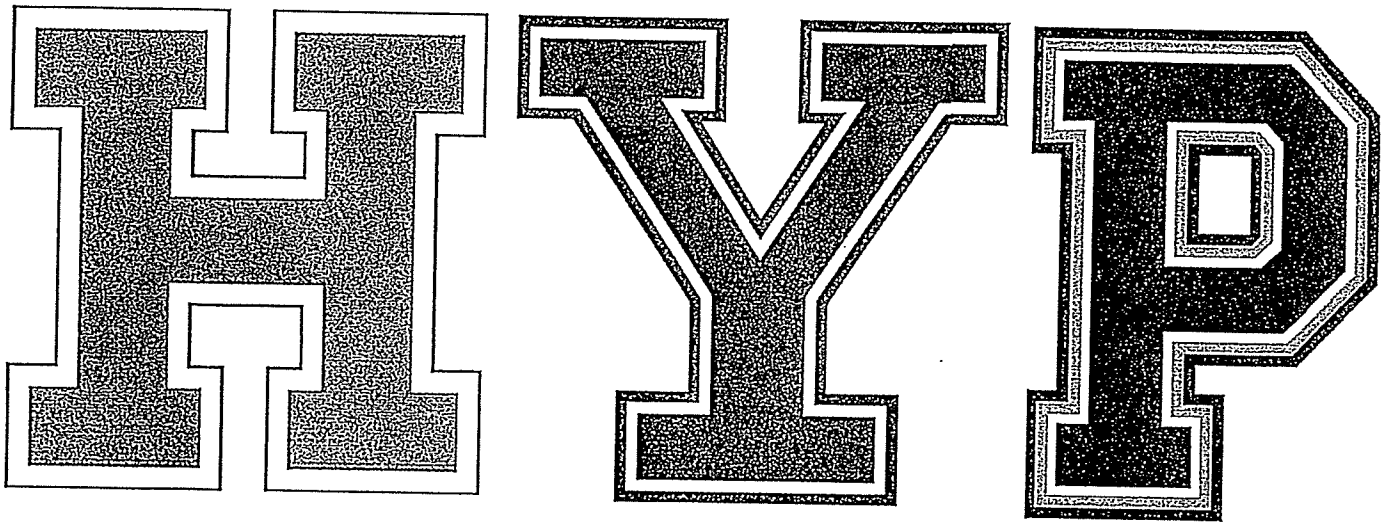
DRAW



SOLVE

Andrea does _____ squats Monday through Friday.

3rd Grade Problem Set Exit Ticket



Module 3

Name _____ Date _____

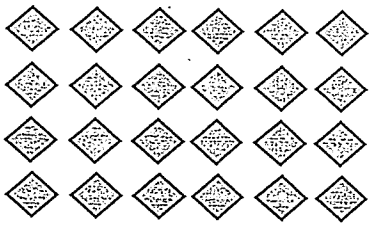
1. a. Solve. Shade in the multiplication facts that you already know. Then, shade in the facts for sixes, sevens, eights, and nines that you can solve using the commutative property.

×	1	2	3	4	5	6	7	8	9	10
1		2	3							
2		4		8				16		
3						18				
4					20					
5										50
6		12								
7										
8										
9										
10										

b. Complete the chart. Each bag contains 7 apples.

Number of Bags	2		4	5	
Total Number of Apples		21			42

2. Use the array to write two different multiplication sentences.



_____ = _____ × _____

_____ = _____ × _____

3. Complete the equations.

a. 2 sevens = _____ twos

= 14

b. 3 _____ = 6 threes

= _____

c. 10 eights = 8 _____

= _____

d. 4 × _____ = 6 × 4

= _____

e. 8 × 5 = _____ × 8

= _____

f. _____ × 7 = 7 × _____

= 28

g. 3 × 9 = 10 threes – _____ three

= _____

h. 10 fours – 1 four = _____ × 4

= _____

i. 8 × 4 = 5 fours + _____ fours

= _____

j. _____ fives + 1 five = 6 × 5

= _____

k. 5 threes + 2 threes = _____ × _____

= _____

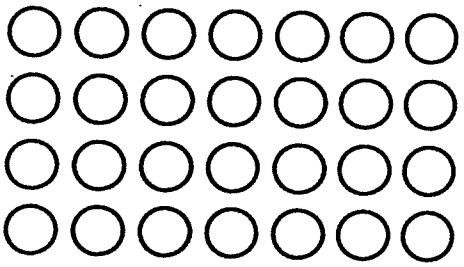
l. _____ twos + _____ twos = 10 twos

= _____

Name:_____ Date:_____

Complete: ☐ Class:_____

1. Use the array to write two different multiplication facts.



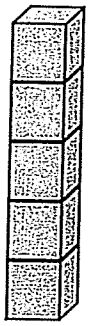
_____ = _____ × _____

_____ = _____ × _____

2. Karen says, "If you know 3 × 8 = 24, then I know the answer to 8 × 3!" Explain why this is true.

Name _____ Date _____

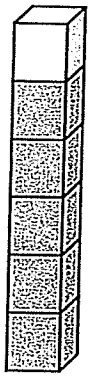
1. Each has a value of 7.



Unit form: 5 _____

Facts: 5 × _____ = _____ × 5

Total = _____



Unit form: 6 sevens = _____ sevens + _____ seven

= 35 + _____

= _____

Facts: _____ × _____ = _____

_____ × _____ = _____

2. a. Each dot has a value of 8

Unit form: 5 _____

Facts: 5 × _____ = _____ × 5

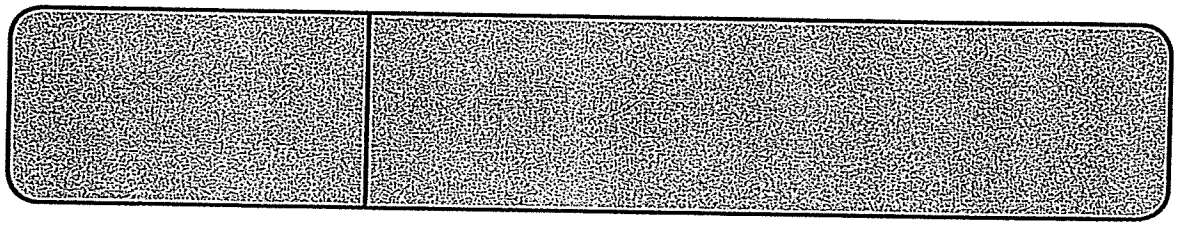
Total = _____

b. Use the fact above to find 8 × 6. Show your work using pictures, numbers, or words.

3. An author writes 9 pages of her book each week. How many pages does she write in 7 weeks? Use a fives fact to solve.

4. Mrs. Gonzalez buys a total of 32 crayons for her classroom. Each pack contains 8 crayons. How many packs of crayons does Mrs. Gonzalez buy?

5. Hannah has $500. She buys a camera for $435 and 4 other items for $9 each. Now Hannah wants to buy speakers for $50. Does she have enough money to buy the speakers? Explain.



Name:_____ Date:_____

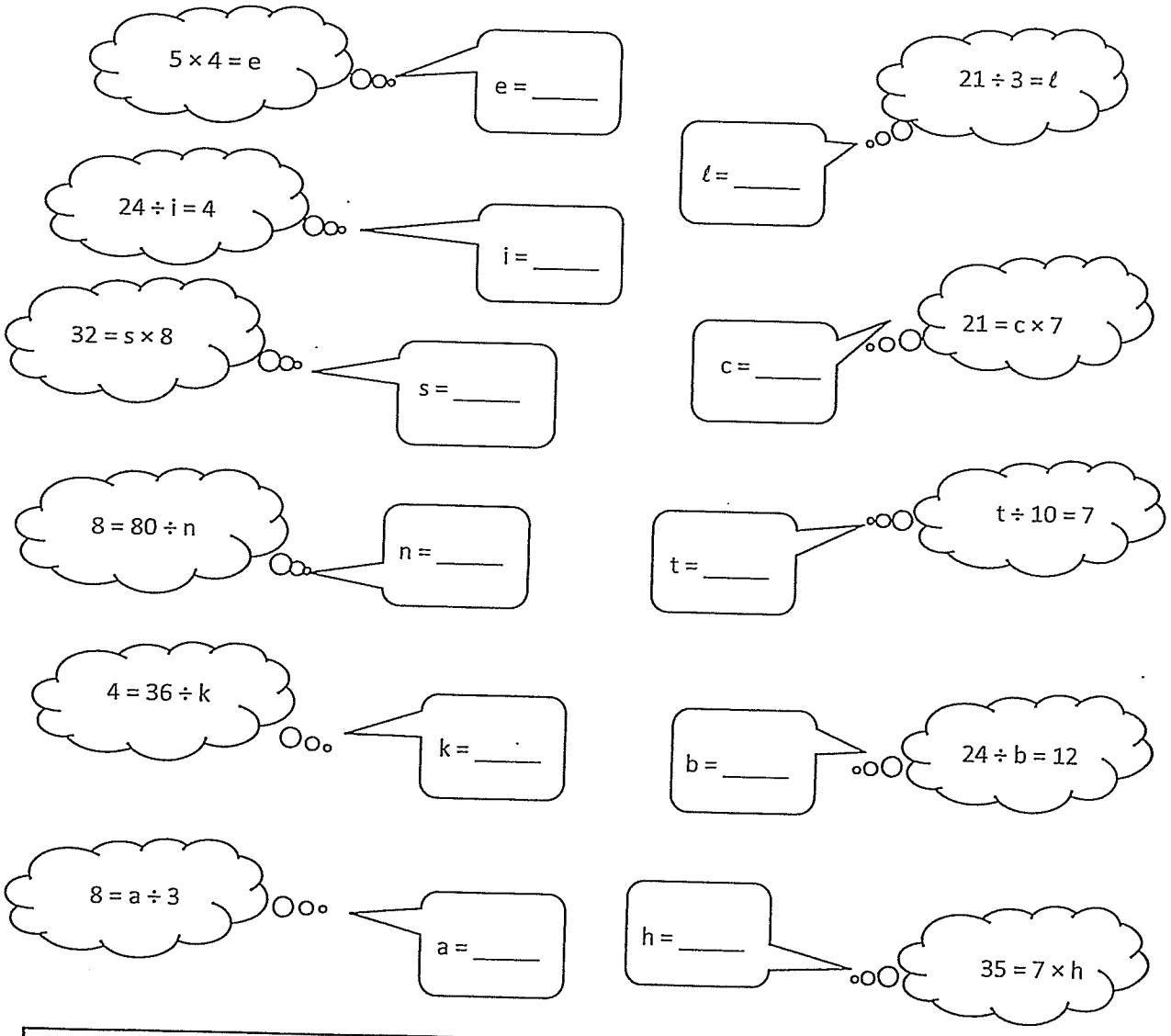
Complete: ☐ Class:_____

1. Use a fives fact to help you solve 7 × 6. Show your work using pictures, numbers, or words.

SHOW YOUR WORK

Name _____ Date _____

1. Each equation contains a letter representing the unknown. Find the value of the unknowns, and then write the letters that match the answers to solve the riddle.



Which tables do you NOT have to learn?

9	6	70	3	5	20	10

70	24	2	7	20	4

2. Lonna buys 3 t-shirts for $8 each.

   a. What is the total amount Lonna spends on 3 t-shirts? Use the letter *m* to represent the total amount of money Lonna spends, and then solve the problem.

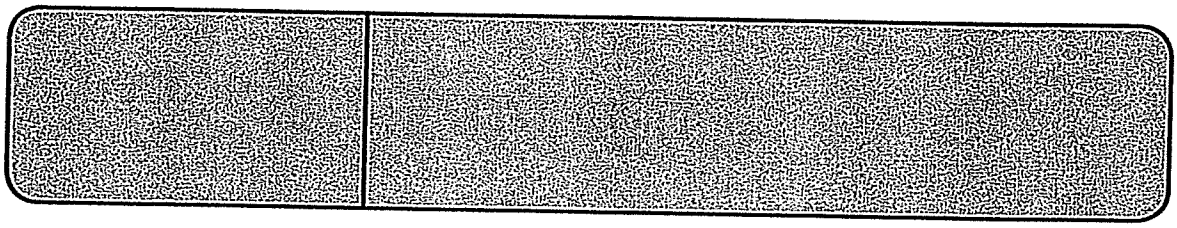
   b. If Lonna hands the cashier 3 ten dollar bills, how much change will she receive? Use the letter *c* in an equation to represent the change, and then find the value of *c*.

3. Miss Potts used a total of 28 cups of flour to bake some bread. She used 4 cups of flour for each loaf of bread. How many loaves of bread did she bake? Represent the problem using multiplication and division sentences and a letter for the unknown. Then, solve the problem.

_____ × _____ = _____

_____ ÷ _____ = _____

4. At a table tennis tournament, two games went on for a total of 32 minutes. One game took 12 minutes longer than the other. How long did it take to complete each game? Use letters to represent the unknowns. Solve the problem.



Name:_____ Date:_____

Complete: ☐ Class:_____

1. Find the value of the unknown in the following problems.

a. $z = 5 \times 9$

$z =$ _____

b. $30 \div 6 = v$

$v =$ _____

c. $8 \times w = 24$

$w =$ _____

d. $y \div 4 = 7$

$y =$ _____

2. Mr. Strand waters his rose bushes for a total of 15 minutes. He waters each rose bush for 3 minutes. How many rose bushes does Mr. Strand water? Represent the problem using multiplication and division sentences and a letter for the unknown. Then, solve the problem.

_____ × _____ = _____

_____ ÷ _____ = _____

Name _____ Date _____

1. Skip-count by six to fill in the blanks. Match each number in the count-by with its multiplication fact.

6	9 × 6
____	6 × 6
18	4 × 6
____	7 × 6
30	2 × 6
36	1 × 6
____	3 × 6
48	10 × 6
____	5 × 6
60	8 × 6

2. Count by six to fill in the blanks below.

6, _____, _____, _____

Complete the multiplication equation that represents the final number in your count-by.

6 × _____ = _____

Complete the division equation that represents your count-by.

_____ ÷ 6 = _____

3. Count by six to fill in the blanks below.

6, _____, _____, _____, _____, _____, _____

Complete the multiplication equation that represents the final number in your count-by.

6 × _____ = _____

Complete the division equation that represents your count-by.

_____ ÷ 6 = _____

4. Mrs. Byrne's class skip-counts by six for a group counting activity. When she points up, they count up by six, and when she points down, they count down by six. The arrows show when she changes direction.

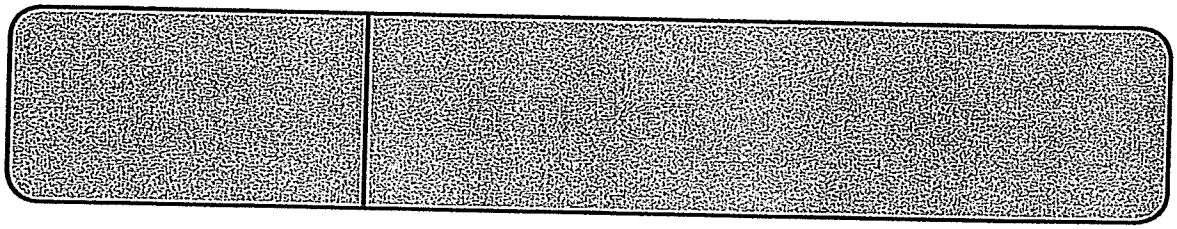
   a. Fill in the blanks below to show the group counting answers.

↑ 0, 6, _____, 18, _____ ↓ _____, 12 ↑ _____, 24, 30, _____ ↓ 30, 24, _____ ↑ 24, _____, 36, _____, 48

   b. Mrs. Byrne says the last number that the class counts is the product of 6 and another number. Write a multiplication sentence and a division sentence to show she's right.

6 × _____ = 48 48 ÷ 6 = _____

5. Julie counts by six to solve 6 × 7. She says the answer is 36. Is she right? Explain your answer.



Name:_____ Date:_____

Complete: ☐ Class:_____

1. Sylvia solves 6 × 9 by adding 48 + 6. Show how Sylvia breaks apart and bonds her numbers to complete the ten. Then, solve.

SHOW YOUR WORK

2. Skip-count by six to solve the following:

a. 8 × 6 = _____ b. 54 ÷ 6 = _____

Name _____ Date _____

1. Skip-count by seven to fill in the blanks in the fish bowls. Match each count-by to its multiplication expression. Then, use the multiplication expression to write the related division fact directly to the right.

7	7 × 6	_____ ÷ 7 = _____
_____	7 × 3	_____ ÷ 7 = _____
21	7 × 8	_____ ÷ 7 = _____
_____	7 × 7	_____ ÷ 7 = _____
_____	7 × 1	_____ ÷ 7 = _____
42	7 × 10	_____ ÷ 7 = _____
49	7 × 9	_____ ÷ 7 = _____
_____	7 × 4	_____ ÷ 7 = _____
_____	7 × 2	_____ ÷ 7 = _____
_____	7 × 5	_____ ÷ 7 = _____

2. Complete the count-by seven sequence below. Then, write a multiplication equation and a division equation to represent each blank you filled in.

7, 14, _____, 28, _____, 42, _____, _____, 63, _____

a. _____ × 7 = _____ _____ ÷ 7 = _____

b. _____ × 7 = _____ _____ ÷ 7 = _____

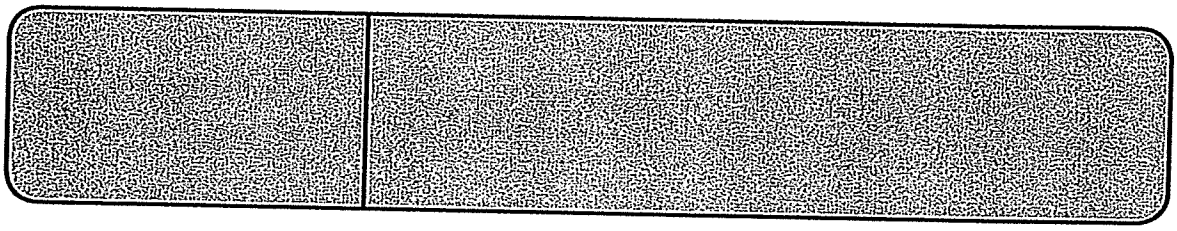
c. _____ × 7 = _____ _____ ÷ 7 = _____

d. _____ × 7 = _____ _____ ÷ 7 = _____

e. _____ × 7 = _____ _____ ÷ 7 = _____

3. Abe says 3 × 7 = 21 because 1 seven is 7, 2 sevens are 14, and 3 sevens are 14 + 6 + 1, which equals 21. Why did Abe add 6 and 1 to 14 when he is counting by seven?

4. Molly says she can count by seven 6 times to solve 7 × 6. James says he can count by six 7 times to solve this problem. Who is right? Explain your answer.



Name:_____ Date:_____

Complete: ☐ Class:_____

1. Complete the count-by seven sequence below. Then, write a multiplication equation and a division equation to represent each number in the sequence.

   7, 14, _____, 28, _____, 42, _____, _____, 63, _____

   a. _____ × 7 = _____ _____ ÷ 7 = _____

   b. _____ × 7 = _____ _____ ÷ 7 = _____

   c. _____ × 7 = _____ _____ ÷ 7 = _____

   d. _____ × 7 = _____ _____ ÷ 7 = _____

   e. _____ × 7 = _____ _____ ÷ 7 = _____

   f. _____ × 7 = _____ _____ ÷ 7 = _____

   g. _____ × 7 = _____ _____ ÷ 7 = _____

   h. _____ × 7 = _____ _____ ÷ 7 = _____

   i. _____ × 7 = _____ _____ ÷ 7 = _____

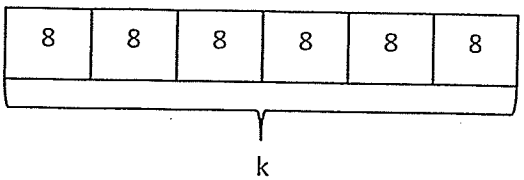
   j. _____ × 7 = _____ _____ ÷ 7 = _____

Name _____ Date _____

1. Match the words to the correct equation.

a number times 6 equals 30	$n \times 7 = 21$
7 times a number equals 42	$n \times 6 = 30$
6 times 7 equals a number	$6 \times 7 = n$
63 divided by a number equals 9	$7 \times n = 42$
36 divided by a number equals 6	$36 \div n = 6$
a number times 7 equals 21	$63 \div n = 9$

2. Write an equation to represent the tape diagram below, and solve for the unknown.



Equation: _____

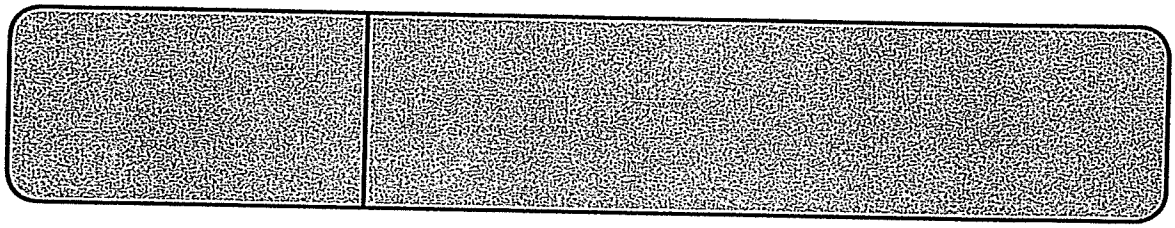
3. Model each problem with a drawing. Then, write an equation using a letter to represent the unknown, and solve for the unknown.

   a. Each student gets 3 pencils. There are a total of 21 pencils. How many students are there?

   b. Henry spends 24 minutes practicing 6 different basketball drills. He spends the same amount of time on each drill. How much time does Henry spend on each drill?

   c. Jessica has 8 pieces of yarn for a project. Each piece of yarn is 6 centimeters long. What is the total length of the yarn?

   d. Ginny measures 6 milliliters of water into each beaker. She pours a total of 54 milliliters. How many beakers does Ginny use?



Name:_____ Date:_____

Complete: ☐ Class:_____

1. Model each problem with a drawing. Then, write an equation using a letter to represent the unknown and solve for the unknown.

   a. Three boys and three girls each buy 7 bookmarks. How many bookmarks do they buy all together?

SHOW YOUR WORK

b. Seven friends equally share the cost of a $56 meal. How much does each person pay?

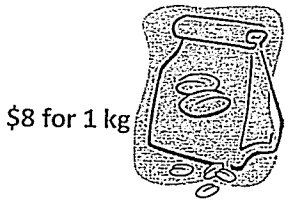
SHOW YOUR WORK

Name _____ Date _____

1. Ms. Santor divides 32 students into 8 equal groups for a field trip. Draw a tape diagram, and label the number of students in each group as n. Write an equation, and solve for n.

2. Tara buys 6 packs of printer paper. Each pack of paper costs $8. Draw a tape diagram, and label the total amount she spends as m. Write an equation, and solve for m.

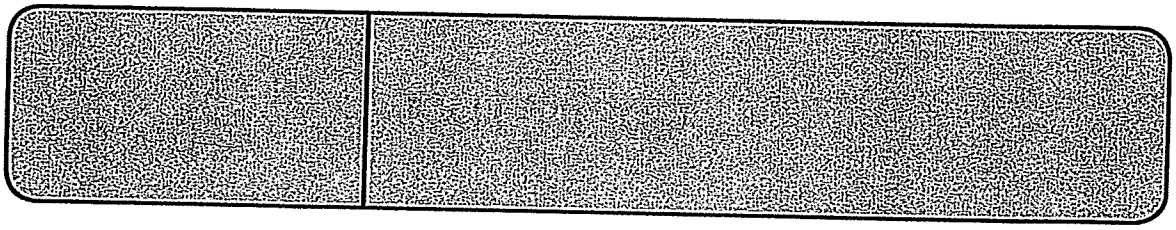
3. Mr. Reed spends $24 on coffee beans. How many kilograms of coffee beans does he buy? Draw a tape diagram, and label the total amount of coffee beans he buys as c. Write an equation, and solve for c.



4. Eight boys equally share 4 packs of baseball cards. Each pack contains 10 cards. How many cards does each boy get?

5. There are 8 bags of yellow and green balloons. Each bag contains 7 balloons. If there are 35 yellow balloons, how many green balloons are there?

6. The fruit seller packs 72 oranges into bags of 8 each. He sells all the oranges at $4 a bag. How much money did he receive?



Name:_____ Date:_____

Complete: ☐ Class:_____

1. Erica buys some packs of rubber bracelets. There are 8 bracelets in each pack.

   a. How many packs of rubber bracelets does she buy if she has a total of 56 bracelets? Draw a tape diagram, and label the total number of packages as p. Write an equation, and solve for p.

SHOW YOUR WORK

b. After giving some bracelets away, Erica has 18 left. How many bracelets did she give away?

SHOW YOUR WORK

Name _____ Date _____

Write an equation, and use a letter to represent the unknown for Problems 1–6.

1. Mrs. Parson gave each of her grandchildren $9. She gave a total of $36. How many grandchildren does Mrs. Parson have?

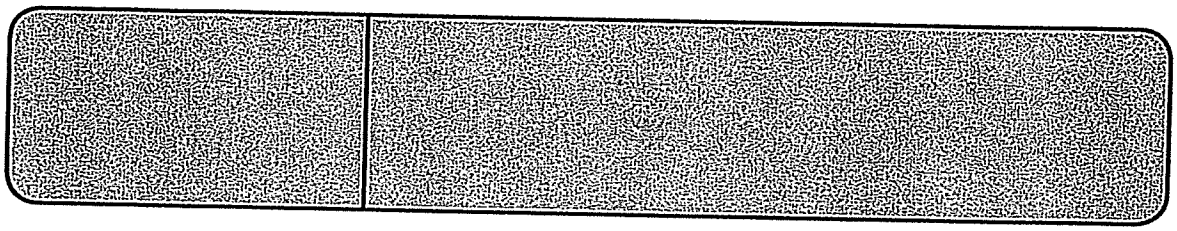
2. Shiva pours 27 liters of water equally into 9 containers. How many liters of water are in each container?

3. Derek cuts 7 pieces of wire. Each piece is 9 meters long. What is the total length of the 7 pieces?

4. Aunt Deena and Uncle Chris share the cost of a limousine ride with their 7 friends. The ride cost a total of $63. If everyone shares the cost equally, how much does each person pay?

5. Cara bought 9 packs of beads. There are 10 beads in each pack. She always uses 30 beads to make each necklace. How many necklaces can she make if she uses all the beads?

6. There are 8 erasers in a set. Damon buys 9 sets. After giving some erasers away, Damon has 35 erasers left. How many erasers did he give away?



Name:_____ Date:_____

Complete: ☐ Class:_____

Use a letter to represent the unknown.

1. Mrs. Aquino pours 36 liters of water equally into 9 containers. How much water is in each container?

SHOW YOUR WORK

2. Marlon buys 9 packs of hot dogs. There are 6 hot dogs in each pack. After the barbeque, 35 hot dogs are left over. How many hot dogs were eaten?

SHOW YOUR WORK

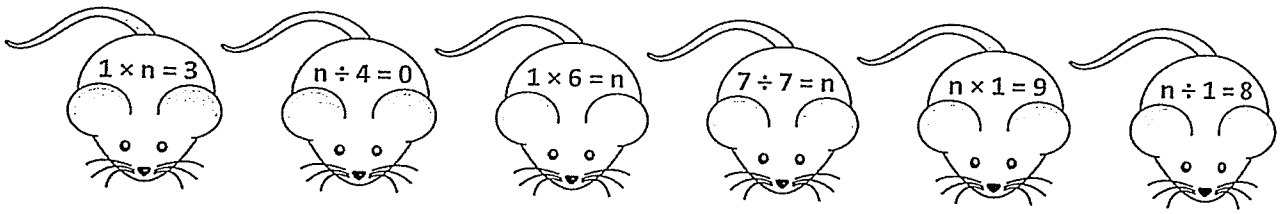
Name _____ Date _____

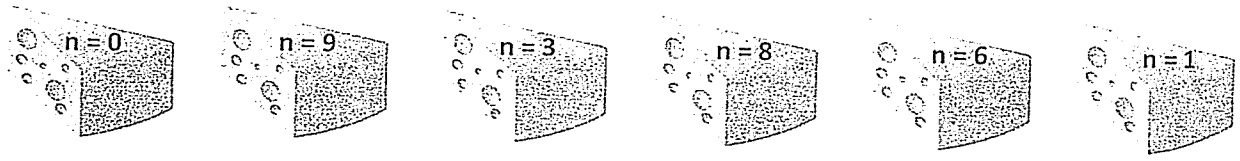
1. Complete.

a. _____ × 1 = 6 b. _____ ÷ 7 = 0 c. 8 × _____ = 8 d. 9 ÷ _____ = 9

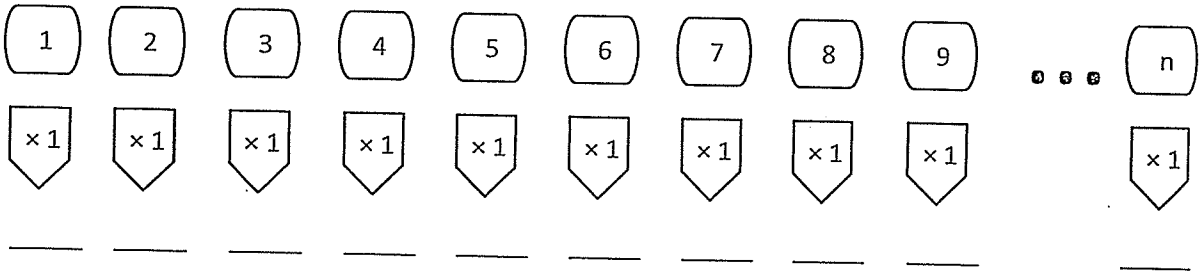
e. 0 ÷ 5 = _____ f. _____ × 0 = 0 g. 4 ÷ _____ = 1 h. _____ × 1 = 3

2. Match each equation with its solution.





3. Let *n* be a number. Complete the blanks below with the products.



What pattern do you notice?

4. Josie says that any number divided by 1 equals that number.

   a. Write a division equation using n to represent Josie's statement.

   b. Use your equation from Part (a). Let $n = 6$. Write a new equation, and draw a picture to show that your equation is true.

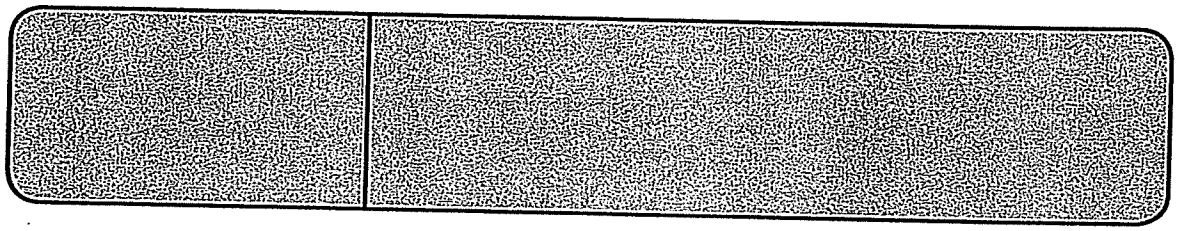
   c. Write the related multiplication equation that you can use to check your division equation.

5. Matt explains what he learned about dividing with zero to his little sister.

   a. What might Matt tell his sister about solving $0 \div 9$? Explain your answer.

   b. What might Matt tell his sister about solving $8 \div 0$? Explain your answer.

   c. What might Matt tell his sister about solving $0 \div 0$? Explain your answer.



Name:_____ Date:_____

Complete: ☐ Class:_____

1. Complete.

a. _____ × 1 = 5

b. 6 × _____ = 6

c. _____ ÷ 7 = 0

d. 5 × _____ = 0

e. 1 = 9 ÷ _____

f. 8 = 1 × _____

2. Luis divides 8 by 0 and says it equals 0. Is he correct? Explain why or why not.

Name _____ Date _____

Use the RDW process for each problem. Explain why your answer is reasonable.

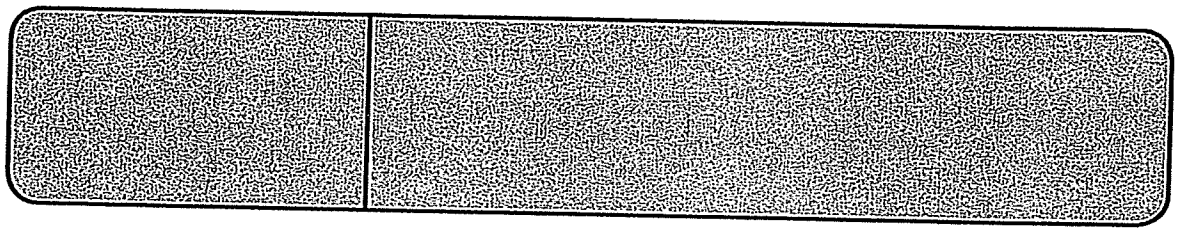
1. Rose has 6 pieces of yarn that are each 9 centimeters long. Sasha gives Rose a piece of yarn. Now, Rose has a total of 81 centimeters of yarn. What is the length of the yarn that Sasha gives Rose?

2. Julio spends 29 minutes doing his spelling homework. He then completes each math problem in 4 minutes. There are 7 math problems. How many minutes does Julio spend on his homework in all?

3. Pearl buys 125 stickers. She gives 53 stickers to her little sister. Pearl then puts 9 stickers on each page of her album. If she uses all of her remaining stickers, on how many pages does Pearl put stickers?

4. Tanner's beaker had 45 milliliters of water in it at first. After each of his friends poured in 8 milliliters, the beaker contained 93 milliliters. How many friends poured water into Tanner's beaker?

5. Cora weighs 4 new, identical pencils and a ruler. The total weight of these items is 55 grams. She weighs the ruler by itself and it weighs 19 grams. How much does each pencil weigh?



Name:_____ Date:_____

Complete: ☐ Class:_____

Use the RDW process to solve. Explain why your answer is reasonable.

1. On Saturday, Warren swims laps in the pool for 45 minutes. On Sunday, he runs 8 miles. It takes him 9 minutes to run each mile. How long does Warren spend exercising over the weekend?

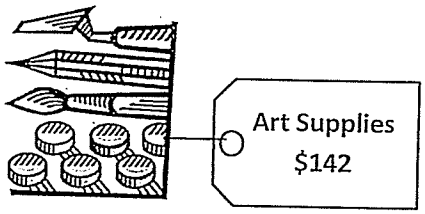
SHOW YOUR WORK

Name _____ Date _____

Use the RDW process to solve each problem. Use a letter to represent the unknown.

1. There are 60 seconds in 1 minute. Use a tape diagram to find the total number of seconds in 5 minutes and 45 seconds.

2. Lupe saves $30 each month for 4 months. Does she have enough money to buy the art supplies below? Explain why or why not.

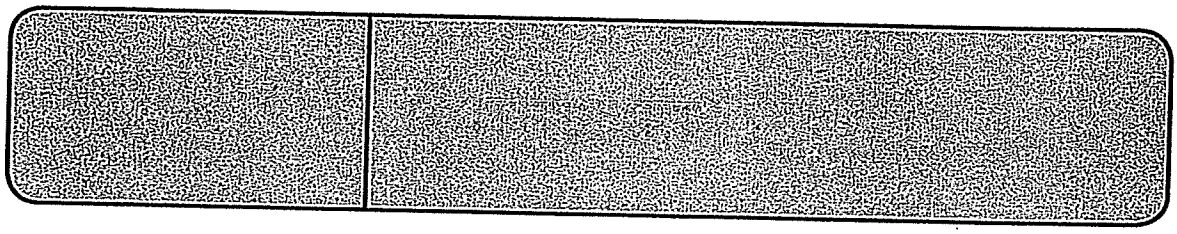


3. Brad receives 5 cents for each can or bottle he recycles. How many cents does Brad earn if he recycles 48 cans and 32 bottles?

4. A box of 10 markers weighs 105 grams. If the empty box weighs 15 grams, how much does each marker weigh?

5. Mr. Perez buys 3 sets of cards. Each set comes with 18 striped cards and 12 polka dot cards. He uses 49 cards. How many cards does he have left?

6. Ezra earns $9 an hour working at a book store. She works for 7 hours each day on Mondays and Wednesdays. How much does Ezra earn each week?



Name:_____ Date:_____

Complete: ☐ Class:_____

1. Use the RDW process to solve. Use a letter to represent the unknown.

Frederick buys a can of 3 tennis balls. The empty can weighs 20 grams, and each tennis ball weighs 60 grams. What is the total weight of the can with 3 tennis balls?

SHOW YOUR WORK