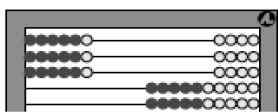


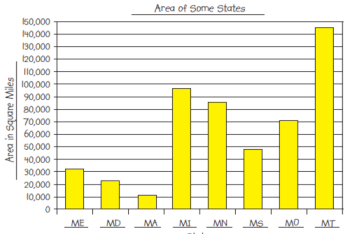
Most recent update: December 29, 2023

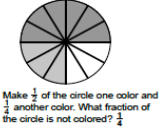


RightStart™ Mathematics

Corrections and Updates for Grade 3 Lessons and Worksheets, second edition

LESSON/WORKSHEET	CHANGE DATE	CORRECTION OR UPDATE
Lesson 8	09/24/2020	The answer to the In conclusion question should say [when the number being subtracted is greater than the top number], not less than.
Lesson 11	05/12/2016	The second graphic on the first has an incorrect graphic. correct graphic.  6 by 3 array.
Lesson 15	11/03/2015	On the second page, under Patterns in Multiples, first paragraph, answer should say [Each multiple is 10 more than the one above it.]
Lesson 30	11/03/2015	Answers for Worksheet 16: Using evens and odds, what kinds of numbers do you need to get an odd difference? even – odd, odd – even
Lesson 32	11/18/2016	In the conclusion, $1 \times 1 = 2$ should be $1 \times 1 = \mathbf{1}$.
Lesson 33	10/14/2021	The instructions for the Ring around the Factor game on the second page have been updated. See attached pdf .
Lesson 37	11/03/2015	Questions 10-13: Delete the check numbers in the answers. Question 29: 54 should also be circled.
Lesson 39	12/12/2019	Answers show check numbers, that is numbers in parentheses after numbers of the equation, (7). This is not taught for another 14 lessons.
Lesson 40	06/25/2023	In the answers for Worksheets 25 on the second page, the last figure in the first column, $4 \times 4 = 1 + 5 \times 3$ is missing a white weight on the right 5-peg.
Lesson 42	12/27/2017	In the warm-up, the line of 8s should read: 8 16 24 32 40 48 56 64 72 80 Also, the top of the second page has been changed to read as follows: Ask: What does the M+ key do? [adds to memory] What do you think the M- key does? [subtracts from memory] Change the problem to: $6 \times 9 - 5 \times 8 = [14]$ and ask: How can you do it now? [Use the M- key instead of the M+ key to subtract the second expression.] Finally, the last equation on the worksheet is missing and should be $5 \times 20 + 2 \times 30 = 160$.

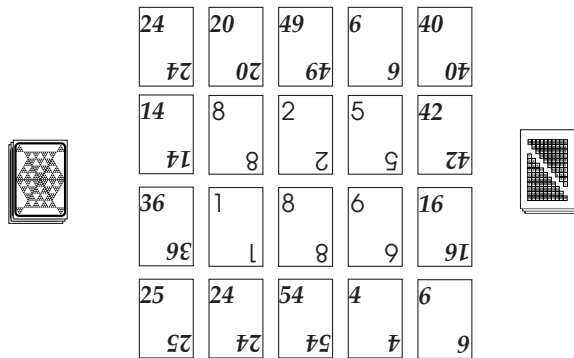
Lesson 45	12/16/2015	On the second page in the third set of graphics, the place value cards should show 6129 , not 6189, rounded to 6000.
Lesson 47	12/16/2015	An answer for the first worksheet, 31-A, is incorrect. 5737 rounded to the nearest 10 is 5740 , not 5840.
Lesson 49	12/16/2015	On the second page under the second graphic, the caption should read "Subtracting 700 ", not 777.
Lesson 51 Worksheet 35	05/30/2022	The second question should read "Make the largest and smallest numbers possible using the 8 place-value cards shown below, not "Make the largest and smallest numbers possible using the 9 place-value cards shown below." No change to the place-value cards shown.
Lesson 52	12/29/2023	Under Worksheet 36, the first equation should read $b = 35 \div 5$, not $b = 35 \times 5$.
Lesson 53	12/16/2015	On the second page, under Practice, the number 2588 shows a check number is [5] , not [2].
Lesson 55	04/11/2016	Answers for Worksheet 39 missed that 18 is a multiple of 2 . That cell should be checked with a "y".
Lesson 59	01/04/2021	On the second page under Building Difference game, the first example should be $90 - 78 = 12$, not $89 - 28 = 61$.
Lesson 60 Worksheet 43	04/16/2018	The worksheet has been reformatted to create more space for the calculations. See pdf .
Lesson 62	12/29/2020	The example under the Worksheet 45 heading is using the associative property, not the distributive property. The example below it, under the Multiplying 50×4 heading, uses the associative property.
Lesson 69	04/11/2016	On the second page, under Can You Find Fraction game, the list of fraction pieces to pick up has a duplicate 2 thirds listed. Eliminate the second 2 thirds.
Lesson 73	03/02/2023	Under the Minutes in an Hour heading, the second sentence should read "Move the minute hand halfway around and ask....," rather than "Move the hour hand halfway around and ask...."
Lesson 74	05/30/2022	On the first page, under Review part of a dollar, the second paragraph has changed to: Tell the child to lay out the six coins of different sizes. Find the light gold coin worth one dollar, or 100¢. Explain that they are not used very often. It then continues on to address the half-dollar as written.
Lesson 77	04/11/2016	On the assessment, problem #11 says "Multiply 6209×8 ." Answer should be 49,672 with a check number of (1) . <div style="text-align: right;"> $\begin{array}{r} 6209 \text{ (8)} \\ \times 8 \text{ (8)} \\ \hline 72 \\ 1600 \\ 48000 \\ \hline 49,672 \text{ (1)} \end{array}$ </div>
Lesson 77	05/18/2017	On the assessment, numbers 54 to 57 should have answers of 80, 800, 8,000, and 80,000 , not 8, 80, 800, and 8,000.
Lesson 79	05/12/2016	Answers to questions 54 to 57 should be 50, 500, 5,000, and 50,000 , not 5, 50, 500, and 5,000.

Lesson 81	04/11/2016	The warm up has the check number of 9 as (9). It should be (0).																															
Lesson 88	12/29/2023	The answers for Worksheet 68-A, putting the fractions in order, was missing the third fraction. Here are the correct answers.	<div>Put these fractions in order from least to greatest.</div> <table><tr><td>$\frac{1}{2}$</td><td>$\frac{1}{3}$</td><td>$\frac{1}{4}$</td><td>$\frac{1}{4}$</td><td>$\frac{1}{3}$</td><td>$\frac{1}{2}$</td></tr><tr><td>$\frac{1}{3}$</td><td>$1\frac{1}{3}$</td><td>$\frac{3}{3}$</td><td>$\frac{1}{3}$</td><td>$\frac{3}{3}$</td><td>$1\frac{1}{3}$</td></tr><tr><td>$\frac{1}{2}$</td><td>$\frac{5}{8}$</td><td>$\frac{1}{4}$</td><td>$\frac{1}{4}$</td><td>$\frac{1}{2}$</td><td>$\frac{5}{8}$</td></tr><tr><td>$\frac{3}{1}$</td><td>$\frac{3}{4}$</td><td>$\frac{3}{8}$</td><td>$\frac{3}{8}$</td><td>$\frac{3}{4}$</td><td>$\frac{3}{1}$</td></tr><tr><td>$\frac{4}{1}$</td><td>$\frac{1}{1}$</td><td>$\frac{5}{1}$</td><td>$\frac{1}{1}$</td><td>$\frac{4}{1}$</td><td>$\frac{5}{1}$</td></tr></table>	$\frac{1}{2}$	$\frac{1}{3}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{3}$	$\frac{1}{2}$	$\frac{1}{3}$	$1\frac{1}{3}$	$\frac{3}{3}$	$\frac{1}{3}$	$\frac{3}{3}$	$1\frac{1}{3}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{5}{8}$	$\frac{3}{1}$	$\frac{3}{4}$	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{3}{4}$	$\frac{3}{1}$	$\frac{4}{1}$	$\frac{1}{1}$	$\frac{5}{1}$	$\frac{1}{1}$	$\frac{4}{1}$	$\frac{5}{1}$
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Lesson 89	12/27/2017	Answer for Worksheet 69, #3 should read: 3. Name the months with four syllables. January and February In conclusion final answer should be [September, April, June, and November]																															
Lesson 90	11/07/2020	In the second paragraph on the second page, the number of days between Memorial Day and Labor Day is 97 or 104 days, not 98 or 105 days.																															
Lesson 90	11/28/2023	On the first page, in the third paragraph under Calendar for a year, the answer to the second question about any months starting on the same day should be: leap years: January, April , & July, not January & July.																															
Lesson 95	04/11/2016	The bar graph solutions for Worksheet 75 are slightly off. See attached PDF .																															
Lesson 95	11/07/2020	The additional game to play is the Rows and Columns game, not Constructing a Bar Graph.																															
Lesson 98 Worksheet 78	01/01/2022	In the second row, the second clock, the hour hand is changed slightly to reflect 9:52 clearer. See PDF .																															
Lesson 99	04/11/2016	In the Problem 1 section, below the story problem, should read: Adding the times, 5, 10, and 15 minutes gives 30 minutes. So she needs to start at 4:00.																															
Lesson 102	12/12/2019	The additional game to play, Multiples Solitaire, is game P19 , not C23.																															
Lesson 103	12/12/2019	The additional game to play, Multiples Solitaire, is game P19 , not C23.																															
Lesson 101 Worksheet 81	04/11/2016	Question #5 should read, "Seven thousand three hundred twenty-nine square miles is water, how much is land?" See attached PDF .																															
Lesson 107 Worksheet 87	11/18/2016	The bottom label for the graphs should read Length of a Side in Centimeters , not Number of Sides. See attached PDF .																															
Lesson 115	05/12/2016	The perimeter for Triangle G is $4-1/2 + 4-1/2 + 3-8/10 = 12-8/10$.																															
Lesson 116	03/09/2020	A paragraph was added on the second page, right above the Worksheet 95 heading: Tell the child that a triangle with an obtuse angle is an obtuse triangle. A triangle with a right angle is a right triangle. A triangle with all acute angles is an acute triangle.																															

Lesson 124	11/07/2020	<p>Three graphics on the second page had very light shading and have been replaced.</p> <div>    </div>
Lesson 125	04/11/2016	Third figure on the worksheet, second question reads "The small square is what fraction of the medium square? [1/2]".
Lesson 133	05/12/2016	<p>Problem #11 says "Find 6049 – 5195." Answer should be 854 with a check number of (8).</p> <div> $\begin{array}{r} 6049 \text{ (1)} \\ - 5195 \text{ (2)} \\ \hline 854 \text{ (8)} \end{array}$ </div>
Lesson 133 Worksheet 110	12/27/2017	Worksheet question #22-45, last row, third problem has been changed from $36 \div 6$ (which is a repeat) to $36 \div 9$. Answer is 4 .
Lesson 139	03/21/2022	Answer for question #93 regarding the difference between the population of BC and AB should be 800,000 , not 700,000.

ACTIVITIES FOR TEACHING:

Ring Around the Factors activity. Have the children do the Ring around the Factors activity with two to four players. In the center, place six basic number cards face up, in two rows of three each. Around these cards, place 14 multiplication cards, also face up. Place the stocks nearby. See the figure below.



The first player checks the inside cards for pairs with a product that equals an outside card. The player removes the corresponding cards and stacks them on three piles face up. More than one group may be collected during a turn. In the figure above, the player can collect three facts: $6 \times 1 = 6$, $8 \times 5 = 40$, and $2 \times 8 = 16$. The player then places a centimeter cube in the matching cell of the short multiplication table on the worksheet. See the left figure below.

1										
2	4									
3	6	9								
4	8	12	16							
5	10	15	20	25						
6	12	18	24	30	36					
7	14	21	28	35	42	49				
8	24	32	40	48	56	64				
9	18	27	36	45	54	63	72	81		
10	20	30	40	50	60	70	80	90	100	

1										
2	4									
3	6									
4			16							
5										
6	12		24		36					
7	14		28	35	49					
8	16		32							
9								81		
10	20				60			90	100	

This table has many of the cells filled in.

For the next turn, fill in the missing cards from the respective card stocks. Play continues as the players work together to fill in as many of the cells on the short multiplication table as possible.

If a player is unable to play, she loses her turn. The next player may replace either two basic number cards or up to three multiplication cards. He then takes his turn. Play continues until the basic number card stock is exhausted.

In conclusion. Ask: Do you prefer the short multiplication table or the whole multiplication table?

EXPLANATIONS:

This game is similar to Ring Around the Products game, found in *Math Card Games* book, P32.

Rather than using centimeter cubes, the cell may be colored in.

Once the children are comfortable with this format of the activity and wants to increase the pace or complexity of the activity, use nine basic numbers in the center, three rows of three cards, with 16 multiplication cards around the center.

Name: _____

Date: _____

Warm-Up

Solve these equations.

$\underline{\hspace{1cm}} \div 7 = 7$

$24 \div \underline{\hspace{1cm}} = 4$

$42 \div 6 = \underline{\hspace{1cm}}$

$8 \times \underline{\hspace{1cm}} = 32$

$50 \div 5 = \underline{\hspace{1cm}}$

$7 \times \underline{\hspace{1cm}} = 35$

$(9 \times \underline{\hspace{1cm}}) + (9 \times 3) = 36$

Subtract the same number 10 times. Use check numbers to check your work.

3790 (1)

$\underline{- 379} \text{ (1)}$

 ()

$\underline{- 379} \text{ (1)}$

 ()

$\underline{- 379} \text{ (1)}$

 ()

$\underline{- 379} \text{ (1)}$

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$\underline{- 379} \text{ (1)}$

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$\underline{- 379} \text{ (1)}$

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$\underline{- 379} \text{ (1)}$

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$\underline{- 379} \text{ (1)}$

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$\underline{- 379} \text{ (1)}$

 ()

$\underline{- 379} \text{ (1)}$

 ()

5620 (4)

$\underline{- 562} \text{ (4)}$

 ()

$\underline{- 562} \text{ ()}$

 ()

$\underline{- 562} \text{ ()}$

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$\underline{- 562} \text{ ()}$

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$\underline{- 562} \text{ ()}$

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$\underline{- 562} \text{ ()}$

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$\underline{- 562} \text{ ()}$

 ()

4580 (8)

$\underline{- 458} \text{ (8)}$

 ()

$\underline{- 458} \text{ ()}$

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$\underline{- 458} \text{ ()}$

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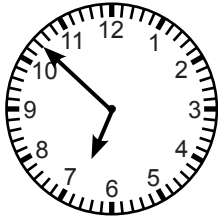
$\underline{- 458} \text{ ()}$

 ()

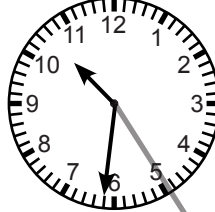
Name: _____

Date: _____

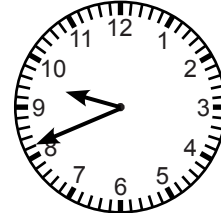
Start at the arrow. Read the instructions below the clock and draw a line from that clock to the next clock. Continue connecting the clocks. Some clocks are extras.



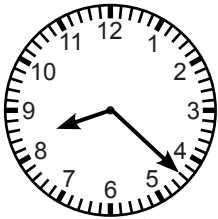
Find 1 hr 39 min later.



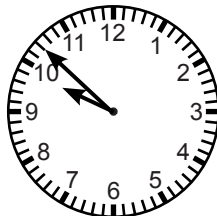
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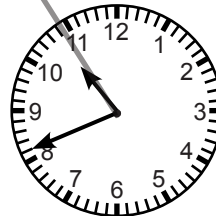
Find 1 hr 30 min later.



Find 1 $\frac{1}{2}$ hr later.



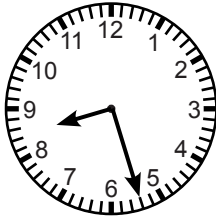
Find 39 min later.



Find 30 min later.



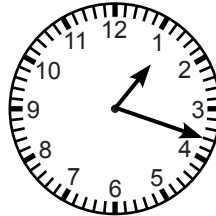
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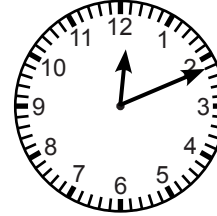
Find 5 min earlier.



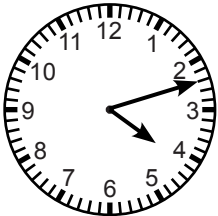
Find 2 hr earlier.



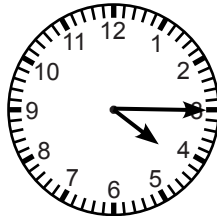
Find 1 hr 7 min earlier.



Find 19 min later.



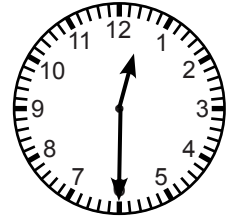
Find 4 hr 15 min later.



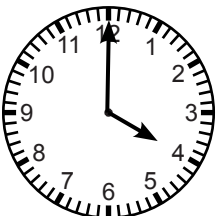
Find 3 min earlier.



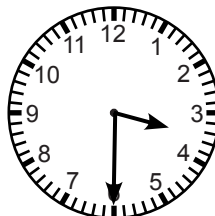
Find 2 $\frac{1}{2}$ hr later.



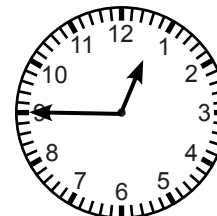
Find half hour later.



Find 15 min later.



Find 3 quarters hr later.



Find quarter hr later.

ACTIVITIES FOR TEACHING:

EXPLANATIONS:

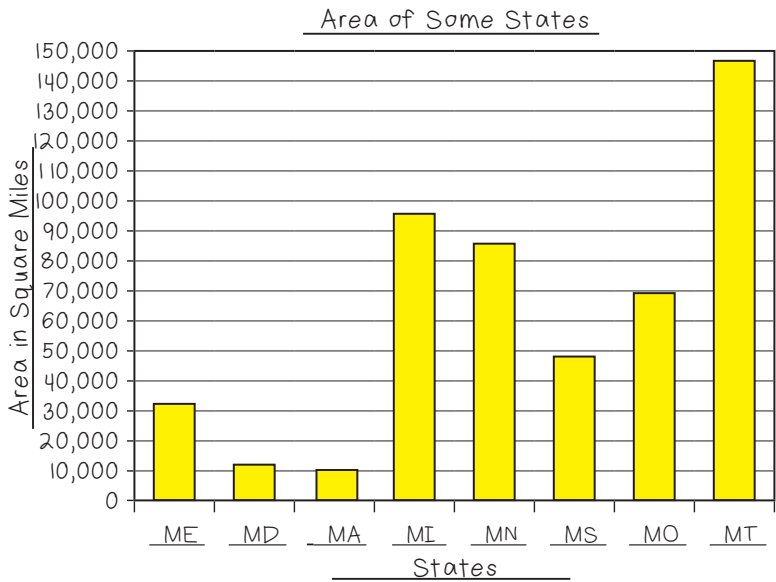


Tell them to make a square meter with the meter sticks. Ask: Would a square meter be large enough to measure the area of a state? [no]

Square miles. Tell them that in the United States, we usually measure these areas in square miles. Help them relate the length of a mile with a familiar distance. Ask: Can you imagine how large a square mile is? [a square whose sides are a mile long]

Worksheet 75. Tell the children the worksheet has a table giving the areas of eight states. They are to make a bar graph to show these areas. Discuss the categories, scales, and titles.

Tell them to complete the worksheet. Solutions are below.



1. Which state has the largest area? **Montana** Does it have the largest population? **no**
2. Which state is 3 times larger than Massachusetts? **Maine**
3. Which state is about half the size of Michigan? **Mississippi**
4. The population graphs keep changing. Do the area graphs also change? **no**
5. Would Missouri and Mississippi fit in Montana at the same time? **yes**
6. How many of the smaller states could fit inside Montana at the same time? **4**

In conclusion. Ask: What is area? [amount of space a flat figure takes up] Would you measure how deep a small lake is in miles or square miles? [miles] Would you measure how large a small lake is in miles or square miles? [square miles]

For students familiar with acres, tell them that 640 acres fit in a square mile.

Worksheet 74 will be needed for reference.

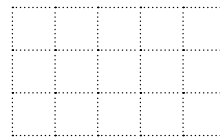
Titles and scales may vary.

If there is additional time following this lesson, play the Rows and Columns game, found in *Math Card Games* book, A53.

3.MD.B.3, 3.MD.C.5, 3.MD.C.5.A, 3.MD.C.5.B

Name: _____

Date: _____

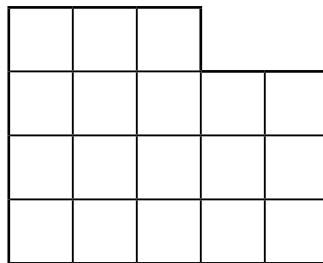
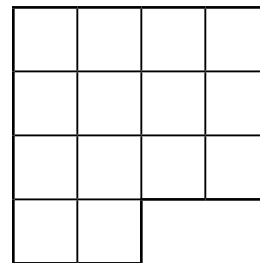
Warm-UpMultiply 4792×8 .Find $4792 - 2974$.Find $4792 + 2974$.

Read the information below and answer the questions.

Minnesota is the twelfth largest state among the 50 states in the United States. The state is 408 miles long and 348 miles wide. It covers 86,943 square miles. Of this total, seven thousand three hundred twenty-nine square miles is covered by water. The highest point in Minnesota is Eagle Mountain at 2301 feet. The mountain is 15 miles from the shore of Lake Superior, which is the lowest point at 602 feet above sea level.

1. How many states are larger than Minnesota? _____
2. How many states are smaller than Minnesota? _____
3. Write the state's area in words. _____
4. Round the state's area to the nearest thousand. _____
5. Seven thousand three hundred twenty-nine square miles is water, how much is land? _____
6. How much longer is the state than it is wide? _____
7. What is the difference between the highest and lowest points? _____

Minnesota is divided into 87 counties; counties are divided into townships. Townships are square-shaped pieces of land with each side 6 miles long. The maps on the right show two counties in southern Minnesota and their townships.

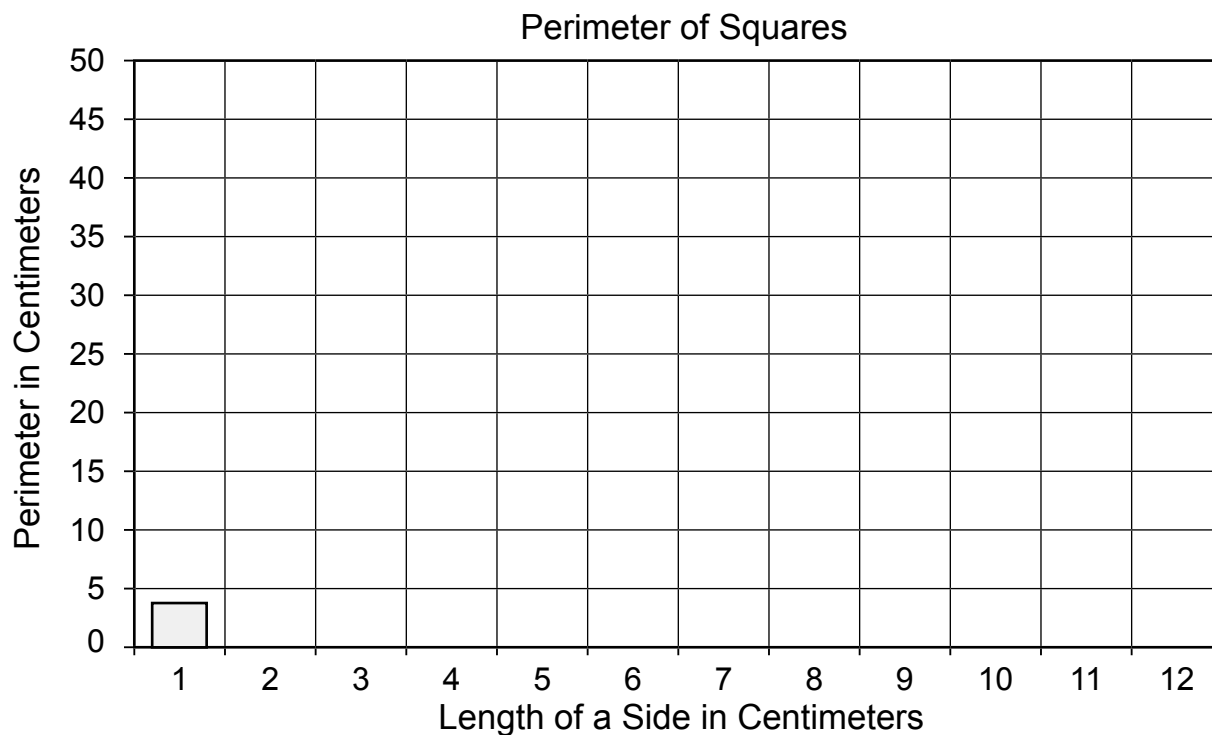
**Cottonwood County****McLeod County**

8. How many townships are in Cottonwood County? _____ in McLeod County? _____
9. Find the perimeter of each county. _____
10. Find the area of each county. _____

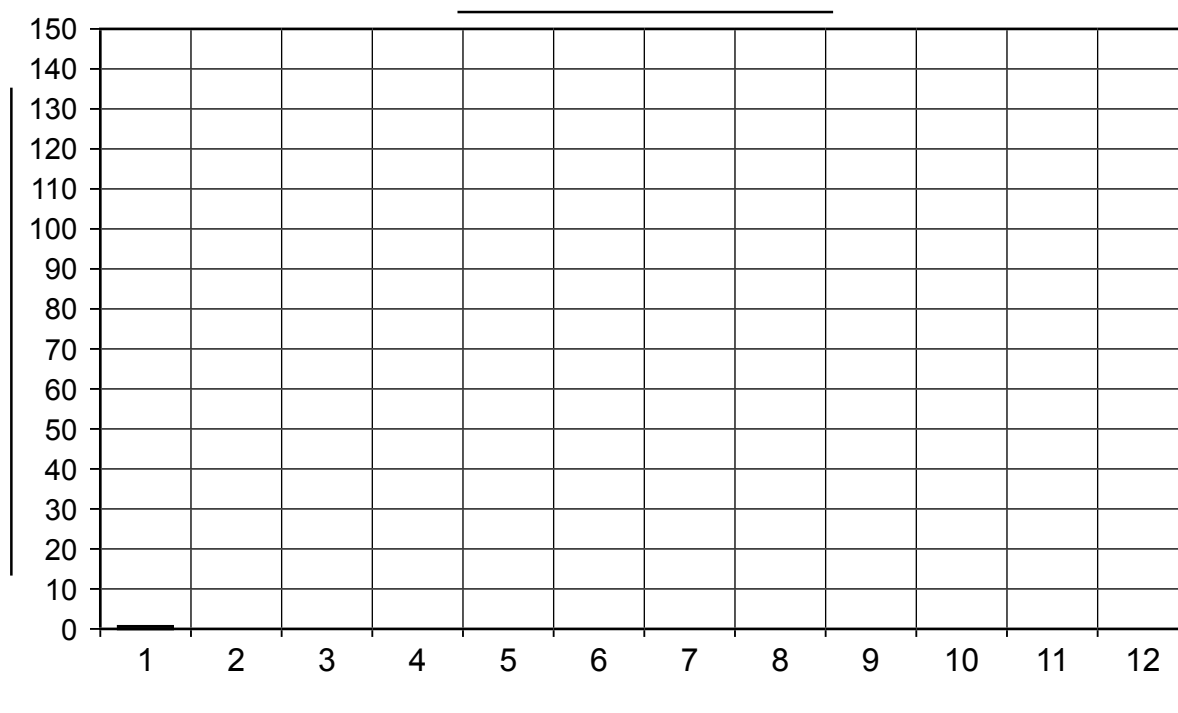
Name: _____

Date: _____

Make a bar graph showing perimeter of the squares from Worksheet 86.



Make a bar graph showing area of the squares from Worksheet 86.



[illegible]

[illegible]

[illegible]

2028

January							February							March						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
						1			1	2	3	4	5				1	2	3	4
2	3	4	5	6	7	8	6	7	8	9	10	11	12	5	6	7	8	9	10	11
9	10	11	12	13	14	15	13	14	15	16	17	18	19	12	13	14	15	16	17	18
16	17	18	19	20	21	22	20	21	22	23	24	25	26	19	20	21	22	23	24	25
23	24	25	26	27	28	29	27	28	29					26	27	28	29	30	31	
30	31																			
April							May							June						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
						1		1	2	3	4	5	6					1	2	3
2	3	4	5	6	7	8	7	8	9	10	11	12	13	4	5	6	7	8	9	10
9	10	11	12	13	14	15	14	15	16	17	18	19	20	11	12	13	14	15	16	17
16	17	18	19	20	21	22	21	22	23	24	25	26	27	18	19	20	21	22	23	24
23	24	25	26	27	28	29	28	29	30	31				25	26	27	28	29	30	
30																				
July							August							September						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
						1			1	2	3	4	5						1	2
2	3	4	5	6	7	8	6	7	8	9	10	11	12	3	4	5	6	7	8	9
9	10	11	12	13	14	15	13	14	15	16	17	18	19	10	11	12	13	14	15	16
16	17	18	19	20	21	22	20	21	22	23	24	25	26	17	18	19	20	21	22	23
23	24	25	26	27	28	29	27	28	29	30	31			24	25	26	27	28	29	30
30	31																			
October							November							December						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7				1	2	3	4						1	2
8	9	10	11	12	13	14	5	6	7	8	9	10	11	3	4	5	6	7	8	9
15	16	17	18	19	20	21	12	13	14	15	16	17	18	10	11	12	13	14	15	16
22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23
29	30	31					26	27	28	29	30			24	25	26	27	28	29	30
														31						