

CSMP Mathematics for the Upper Primary Grades Part IV Blacklines

Note: This packet contains blackline masters for home activities, parent letters, and numerous activities that coordinate with *CSMP Mathematics for the Upper Primary Grades, Part IV*. There are no limits to the number of times these blacklines may be reproduced.

The Home Activity section begins with an introductory letter to parents/guardians. Subsequent home activities may be reproduced and cut off, one at a time, and sent home as appropriate. The remaining blacklines coordinate with lessons in the four strands, N, L, G, and W. They are organized in order, by strand.

MREL

UPG-IV HOME ACTIVITIES

Dear Parent/Guardian:

Activities that accompany various lessons in our mathematics program (*CSMP Mathematics for the Upper Primary Grades*) will be sent home with your child periodically. They will be called “home activities” rather than “homework,” because we hope you will use them as an opportunity to become involved with your child in learning more about the *CSMP* tools, methods, and skills.

Some home activities will be follow-up or practice for a class lesson; others will be for enrichment or extension. Please keep all the activities and materials in the envelope provided. Some materials may be used more than once, and you may want to refer back to previous activities.

Sincerely,

UPG-IV HOME ACTIVITIES

N1

Try to find opportunities to practice subtraction facts with your child. Both oral and written practice can be helpful. The calculator is a nice tool to use to practice facts. For example, prepare the calculator to subtract 6 from various numbers (facts involving -6) as follows:

- 1) Start with 0 on the display.
 - 2) Press $\boxed{0} \boxed{=} \boxed{0} \boxed{=}$. 0 will be on the display again.
 - 3) Enter any number and then press $\boxed{=}$. The calculator will subtract 6 from the number.
-

N4

Use real money to do some of the following activities with your child.

- 1) Review the values of various coins.
 - 2) Make trades such as five nickels for a quarter, or five dimes for a half-dollar, or two dimes and a nickel for a quarter, and so on.
 - 3) Count a collection of nickels, dimes, or quarters.
 - 4) Practice making various amounts of money in several ways.
 - 5) Calculate the amount of money in a given collection of coins.
-

N5

Again, find opportunities to practice subtraction facts with your child. Use numbers up to 20.

N10

Try to find opportunities to practice multiplying by 10 with your child. The following are some examples; you may also like to refer back to a letter (N25) that we sent a couple months ago.

- 1) Do some mental arithmetic involving $10x$. Use one- and two-digit numbers to multiply by 10.
- 2) Make ¢ -checkers to use on your home Minicomputer. For example:

$$10 \times 26 = \begin{array}{|c|c|} \hline & \\ \hline & \\ \hline \end{array} \begin{array}{|c|c|} \hline & \\ \hline \text{¢} & \\ \hline \end{array} \begin{array}{|c|c|} \hline & \\ \hline & \text{¢} \\ \hline \end{array} = \begin{array}{|c|c|} \hline & \\ \hline \bullet & \\ \hline \end{array} \begin{array}{|c|c|} \hline & \\ \hline \bullet & \bullet \\ \hline \end{array} \begin{array}{|c|c|} \hline & \\ \hline & \\ \hline \end{array}$$

$10 \times 26 = 260$

- 3) Put multiples of 10 on the Minicomputer using ¢ -checkers. For example:

$$450 = \begin{array}{|c|c|} \hline & \\ \hline & \\ \hline \end{array} \begin{array}{|c|c|} \hline & \text{¢} \\ \hline & \\ \hline \end{array} \begin{array}{|c|c|} \hline & \text{¢} \\ \hline & \text{¢} \\ \hline \end{array} \quad 390 = \begin{array}{|c|c|} \hline & \\ \hline & \\ \hline \end{array} \begin{array}{|c|c|} \hline & \\ \hline \text{¢} & \text{¢} \\ \hline \end{array} \begin{array}{|c|c|} \hline & \text{¢} \\ \hline & \text{¢} \\ \hline \end{array}$$

UPG-IV HOME ACTIVITIES

N13

Try to solve this calculator puzzle with your child.

The only keys you may use are \square , \square , $+$, $=$, \times , \div , and \square .

You may use the keys in any way you like.

Start with 0 on the display. Try to put 50 (or 42 or 15) on the display.

N16

Try to solve this arrow road problem with your child.

Use only arrows for $10x$, $+1$, and -1 .

Build the shortest road (fewest arrows) you can from 17 to 195.

N17

Your child is bringing home an arrow picture showing his or her favorite way to subtract $650 - 298$.

Try to use a similar method with your child to solve these subtraction problems.

$$221 - 98$$

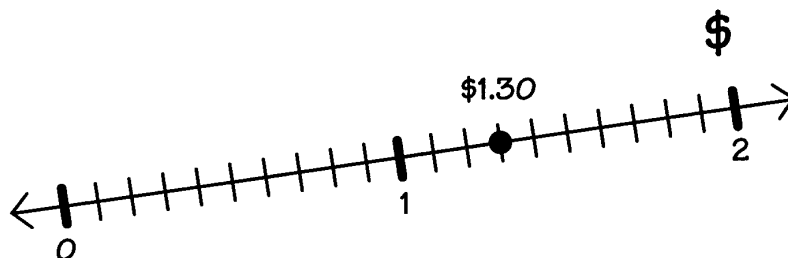
$$73 - 49$$

$$152 - 97$$

$$312 - 195$$

N19

Try to arrange for your child to count collections of coins; for example, the coins in your pocket or purse. Then draw a number line and locate amounts of money (less than \$2.00). For example:



UPG-IV HOME ACTIVITIES

N20

Pose this question and, with your child, draw an arrow road to show how to answer the question.

A recipe for cookies makes 15. If the recipe is doubled and doubled again, how many cookies will be made?

Can you double the recipe once more?

N23

We have been solving some problems in which we compare prices of items packaged in different quantities. For example:

Catalog #1 has scissors in packages of 5 : 5 scissors for \$1.20.

Catalog #2 has scissors in packages of 8 : 8 scissors for \$2.10.

Which catalog offers the best price?

One way to answer this question is to find how much equal quantities would cost from both catalogs. We calculated how much 40 scissors cost from both catalogs.

Try to solve problems similar to this one at home with your child. You may be able to find some real examples, or use this one.

Store #1 has cookies in packages of 6 : 6 cookies for \$1.10

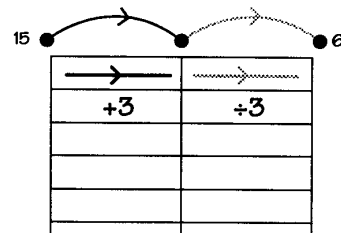
Store #2 has cookies in packages of 8 : 8 cookies for \$1.50

Which store has the better price on cookies?

Allow your child to draw pictures or use objects while solving such problems.

N27

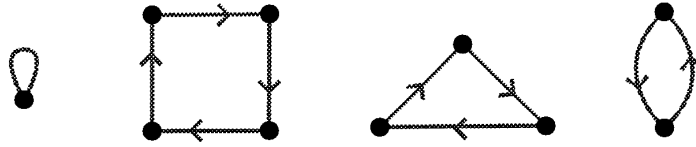
Find possible labels for the arrows in this picture. One of the many possibilities is given in the chart. Sometimes let your child label one arrow while you label the other.



UPG-IV HOME ACTIVITIES

L1

Ask your child to tell you how the picture here is for a changing seats game. If the participants change seats many times, when (after which rounds) will everyone be back in his or her own seat?



L6

Your child is bringing home a storybook called *Dancing Friends*. Read the story with your child and talk about the interesting new operation \oplus that the ten numbers use in this story. Please return the storybook to school.

L11

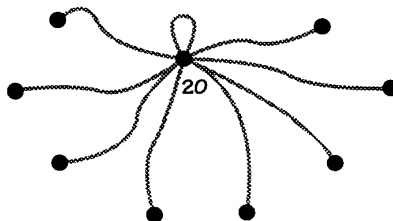
Do you remember the story of *Dancing Friends*? Today we invented a new multiplication game for the ten numbers to play. Ask your child to explain \otimes , and use this multiplication operation to complete the number sentences on Worksheets L11* and **.

L14

Today we heard a story called *Talkative Numbers*. Because the numbers were so talkative, they had to follow a new rule.

Two numbers may talk to each other
if and only if
one number is a multiple of the other

Ask your child to tell you a little more about the story. Then, with your child, try to find some numbers that 20 may talk with following the rule.



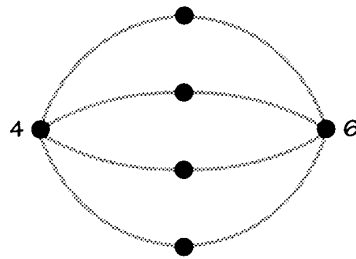
UPG-IV HOME ACTIVITIES

L15

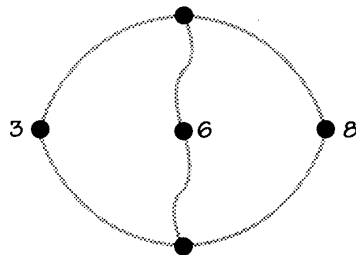
Here are some other problems you and your child may like to solve in the story *Talkative Numbers*. Remember the rule:

**Two numbers may talk to each other
if and only if
one number is a multiple of the other**

1. Find some numbers that 11 may talk with.
2. Find some numbers other than 0 and 1 that both 4 and 6 may talk with.



3. Find some numbers other than 0 and 1 that 3, 6, and 8 may all talk with.



UPG-IV HOME ACTIVITIES

G3

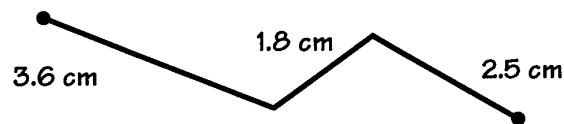
With this activity, we are sending a grid with a point labeled **N**. Nora's house is at **N** in a neighborhood where all the streets go either east and west or north and south. Ask your child to tell you about Nora's neighborhood. Then, with your child, solve these problems in Nora's neighborhood.

- Find all the places a taxi-distance of three from Nora's house. How many places did you find? (Taxi-distance is the length of a shortest path following the streets between two points.)
 - Find all the places a taxi-distance of six from Nora's house. How many places did you find?
-

G4

Try to find some opportunities to practice adding decimal numbers with your child. For example:

- Find the total length of a zigzag when the parts are measured in centimeters.

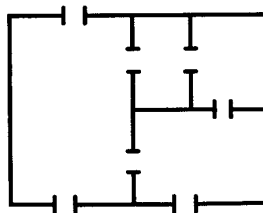


- Calculate the total price for two or three items when the prices are given in dollars and cents.

Milk	\$2.19
Bread	\$1.55
Apples	\$1.38

G8

Work with your child to draw a simple floor plan for one floor of your house. Include only rooms and doors. Here is a sample floor plan with four rooms and seven doors.

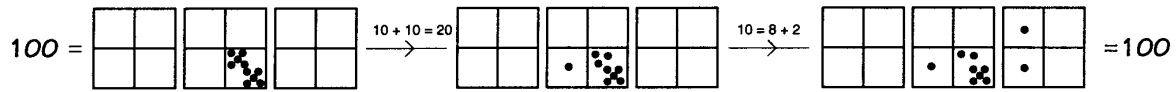


Ask your child to describe a house tour as we did in class. (A tour goes through every door exactly once.) Check to see if you can make a tour of your house.

UPG-IV HOME ACTIVITIES

W8

In a story-workbook, our number friend 100 taught us how to show 100 on the Minicomputer with ten checkers in many different ways. We started with ten 10's on the Minicomputer and then made one forward and one backward trade.

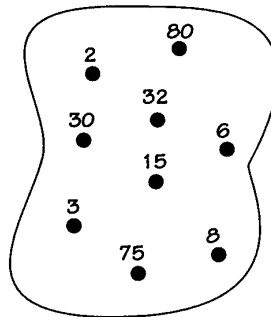


Each time we repeat this kind of trading (one forward and one backward trade), we get 100 in a different way but always with ten checkers. Ask your child to explain 100's game and play it on your home Minicomputer. You may like to play it with numbers other than 100.

W16

Here is a money puzzle for you to solve with your child. Place all the numbers from the string into the story so that it makes sense.

Ted has a lot of coins but not too much money.
 Ted has _____ pennies
 Ted has _____ nickels, or _____ ¢ in nickels.
 Ted has _____ dimes, or _____ ¢ in dimes.
 Ted has _____ quarters, or _____ ¢ in quarters.
 Altogether, Ted has _____ coins, or \$ _____ .



You may like to use coins to check your solution.

N8



Dear Parent/Guardian:

We are working now on a paper/pencil method (algorithm) for subtraction in our math class. This may be a little later than you might have expected. However, this is not the beginning of our work on the subtraction concept, nor on solving subtraction problems. Your child has been subtracting numbers using a variety of methods for some time now. Here are some examples.

<p>Use composition of arrows.</p> <p style="text-align: center;">$135 - 97 = 38$</p>	<p>Subtract the tens and then the ones.</p> <p style="text-align: center;">$103 - 34 = 69$</p>																	
<p>Make the problem easier.</p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: center;">56</td> <td style="text-align: center;">→ add 3</td> <td style="text-align: center;">59</td> </tr> <tr> <td style="text-align: center;"><u>-27</u></td> <td style="text-align: center;">to both</td> <td style="text-align: center;"><u>-30</u></td> </tr> <tr> <td style="text-align: center;">29</td> <td style="text-align: center;">←</td> <td style="text-align: center;">29</td> </tr> </table>	56	→ add 3	59	<u>-27</u>	to both	<u>-30</u>	29	←	29	<p>Use the Minicomputer.</p> <p style="text-align: center;">$76 - 32 =$ <table style="display: inline-table; border-collapse: collapse;"> <tr> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px; text-align: center;">•</td> <td style="border: 1px solid black; width: 20px; height: 20px;"></td> <td style="border: 1px solid black; width: 20px; height: 20px; text-align: center;">•</td> </tr> <tr> <td style="border: 1px solid black; text-align: center;">✕</td> <td style="border: 1px solid black; text-align: center;">✕</td> <td style="border: 1px solid black; text-align: center;">✕</td> <td style="border: 1px solid black;"></td> </tr> </table> $= 44$</p>		•		•	✕	✕	✕	
56	→ add 3	59																
<u>-27</u>	to both	<u>-30</u>																
29	←	29																
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✕	✕	✕																

Using methods such as these, your child will better understand the subtraction process and will become skillful in solving subtraction problems.

We believe that if a standard paper/pencil method is used too early, it may inhibit a child's desire and/or ability to estimate, to do mental arithmetic, to use patterns, and to use other more flexible methods for doing calculations.

(over)

The algorithm suggests we use a sequence of routine steps and these earlier experiences help us understand reasons for the steps. The following is one paper/pencil method that we have been using. It is sometimes called a *compensation* or *equal additions* method, as opposed to a *borrowing* or *regrouping* method. Ask your child to explain this method to you.

Step 1
(ones place)

$$\begin{array}{r}
 302 \\
 -158 \\
 \hline
 \end{array}
 \xrightarrow[\text{add 1 ten}]{\text{add 10 ones}}
 \begin{array}{r}
 30\overset{10}{2} \\
 -158 \\
 \hline
 \end{array}
 \xrightarrow[\text{12} - 8 = 4]{\text{subtract ones}}
 \begin{array}{r}
 30\overset{10}{2} \\
 -158 \\
 \hline
 4
 \end{array}$$

Step 2
(tens place)

$$\begin{array}{r}
 30\overset{10}{2} \\
 -158 \\
 \hline
 4
 \end{array}
 \xrightarrow[\text{add 1 hundred}]{\text{add 10 tens}}
 \begin{array}{r}
 30\overset{10}{0}\overset{10}{2} \\
 -158 \\
 \hline
 4
 \end{array}
 \xrightarrow[\text{10} - 6 = 4]{\text{subtract tens}}
 \begin{array}{r}
 30\overset{10}{0}\overset{10}{2} \\
 -158 \\
 \hline
 44
 \end{array}$$

Step 3
(hundreds place)

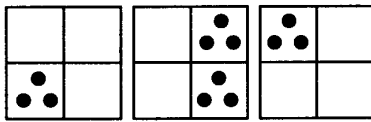
$$\begin{array}{r}
 30\overset{10}{0}\overset{10}{2} \\
 -158 \\
 \hline
 44
 \end{array}
 \xrightarrow[\text{3} - 2 = 1]{\text{subtract hundreds}}
 \begin{array}{r}
 30\overset{10}{0}\overset{10}{2} \\
 -158 \\
 \hline
 144
 \end{array}$$

In doing subtraction calculations at home, remember that a paper/pencil method is only one method. Sometimes we might better use mental methods, number patterns, or even a calculator. We hope that a variety of methods will help children develop the ability to check their work and recognize reasonable answers. Also, remember that calculation should be a tool for solving interesting problems rather than simply a chore done for its own sake.

Sincerely,

Dear Parent/Guardian:

We have been using the Minicomputer to help us solve multiplication problems when we multiply a two- or three-digit number by a one-digit number.



$$3 \times 258$$

$$\begin{array}{r}
 258 \\
 \times 3 \\
 \hline
 24 \\
 150 \\
 600 \\
 \hline
 774
 \end{array}$$

What number is on the ones board?

$$3 \times 8 = 24$$

What number is on the tens board?

$$3 \times 50 = 150$$

What number is on the hundreds board?

$$3 \times 200 = 600$$

Altogether

You can similarly use your home Minicomputer to work on multiplication problems. Perhaps you will not bother with the Minicomputer, and just think about it as you write the record on the right above.

We hope you will practice doing some multiplication problems (multiply by a single digit) with your child.

Sincerely,

CHESS CLUB

10 members total
Two more 3rd graders than 2nd graders
Same number of 3rd and 4th graders

SPANISH CLUB

18 members total
Same number of 2nd and 3rd graders
Three less 4th graders than 3rd graders

COMPUTER CLUB

One-half of the club is 3rd graders
There are five 4th graders
Twice as many 3rd graders as 4th graders

BOWLING CLUB

12 members total
Twice as many 2nd graders as 3rd graders
Two more 4th graders than 2nd graders

MATH CLUB

Between 15 and 20 members
One more 3rd grader than 2nd graders
One more 4th grader than 3rd graders

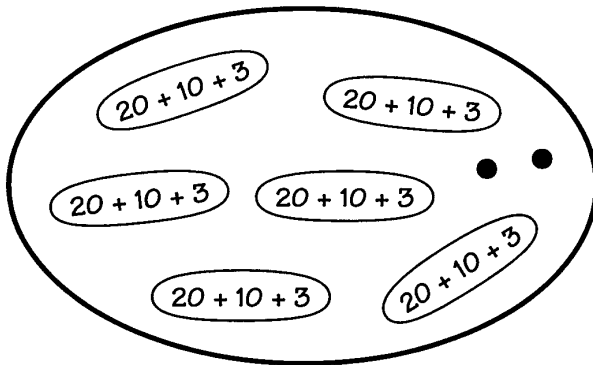
WRITING CLUB

16 members total
Twice as many 3rd graders as 2nd graders
More than two 2nd graders
Less than five 4th graders

Dear Parent/Guardian:

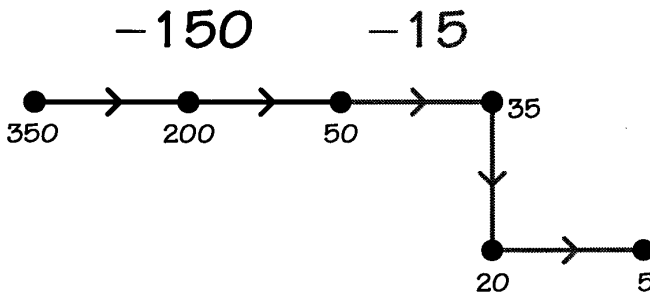
We are working on division in our math class; however, we are not yet ready to use a routine paper/pencil algorithm for division. The following are two examples of some division experiences your child has had. Please do not expect proficiency with long division at this time, even though the record we keep looks like a long division calculation. At this time we are still working on division concepts and understanding the division process. These experiences will help us later to develop a meaningful step-by-step method.

Example 1. Share 200 peanuts among 6 children.



$$\begin{array}{r}
 33 \text{ R} = 2 \\
 6 \overline{)200} \\
 \underline{-120} \quad 20 \text{ each} \\
 80 \\
 \underline{-60} \quad 10 \text{ each} \\
 20 \\
 \underline{-18} \quad 3 \text{ each} \\
 2
 \end{array}$$

Example 2. How many packages of 15 can be filled with 350?



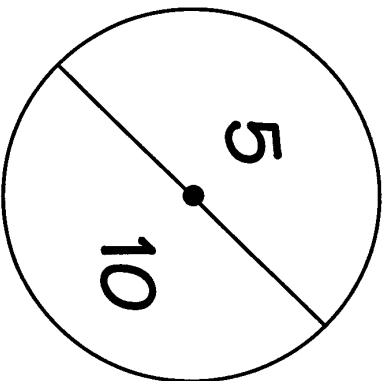
$$\begin{array}{r}
 23 \text{ R} = 5 \\
 15 \overline{)350} \\
 \underline{-150} \quad 10 \text{ packages} \\
 200 \\
 \underline{-150} \quad 10 \text{ packages} \\
 50 \\
 \underline{-45} \quad 3 \text{ packages} \\
 5
 \end{array}$$

You may like to do a couple similar division problems with your child. Let your child help decide how many to give to each person or how many packages to fill at one time.

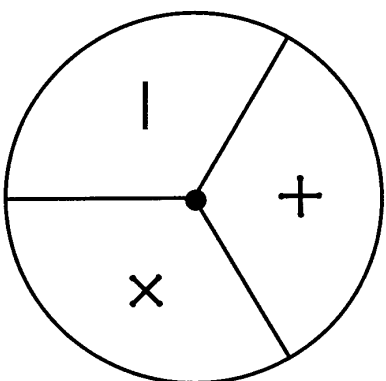
Sincerely,

L7

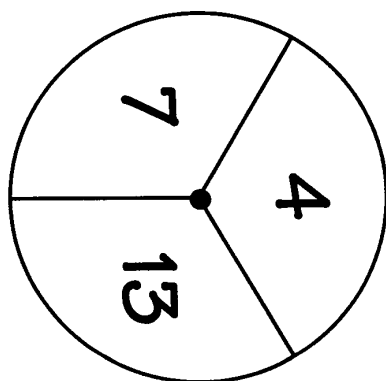
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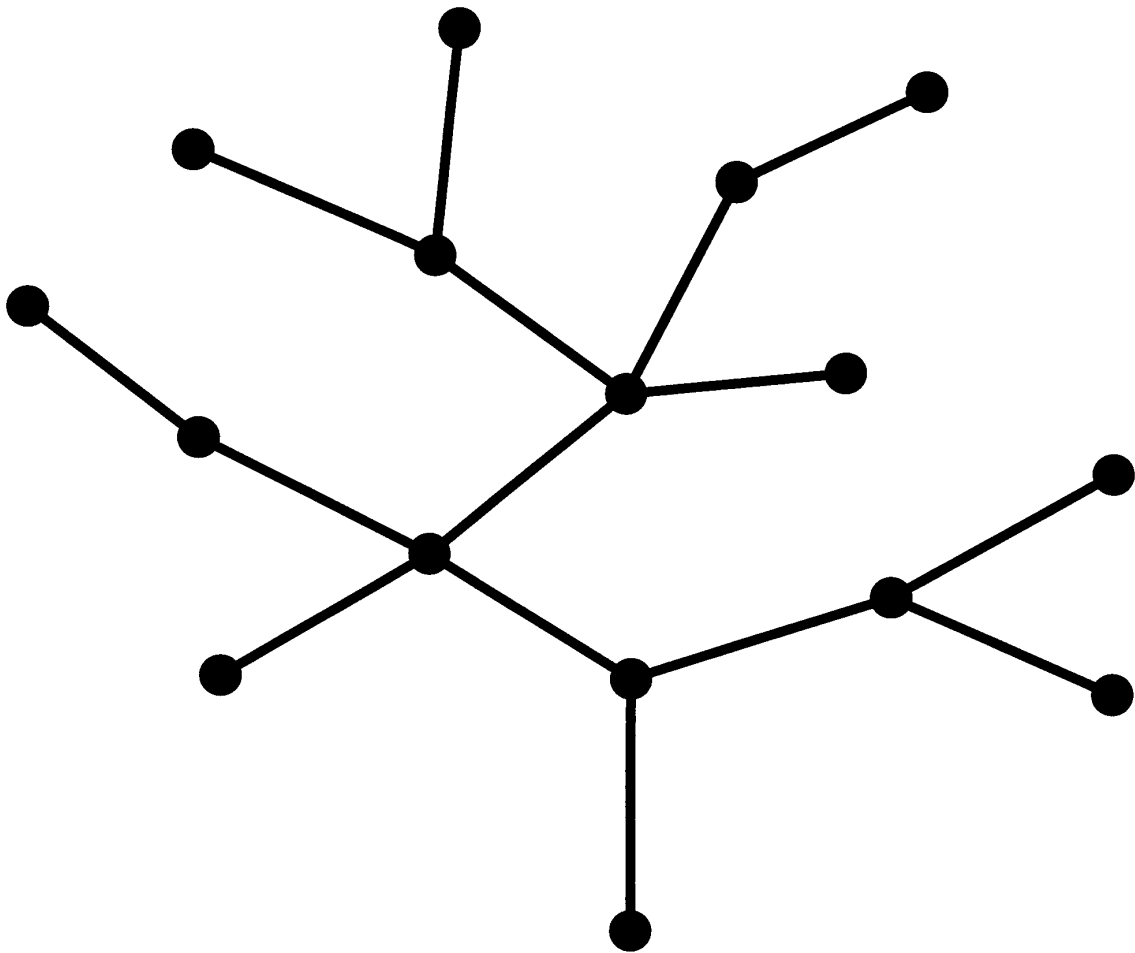
II



III

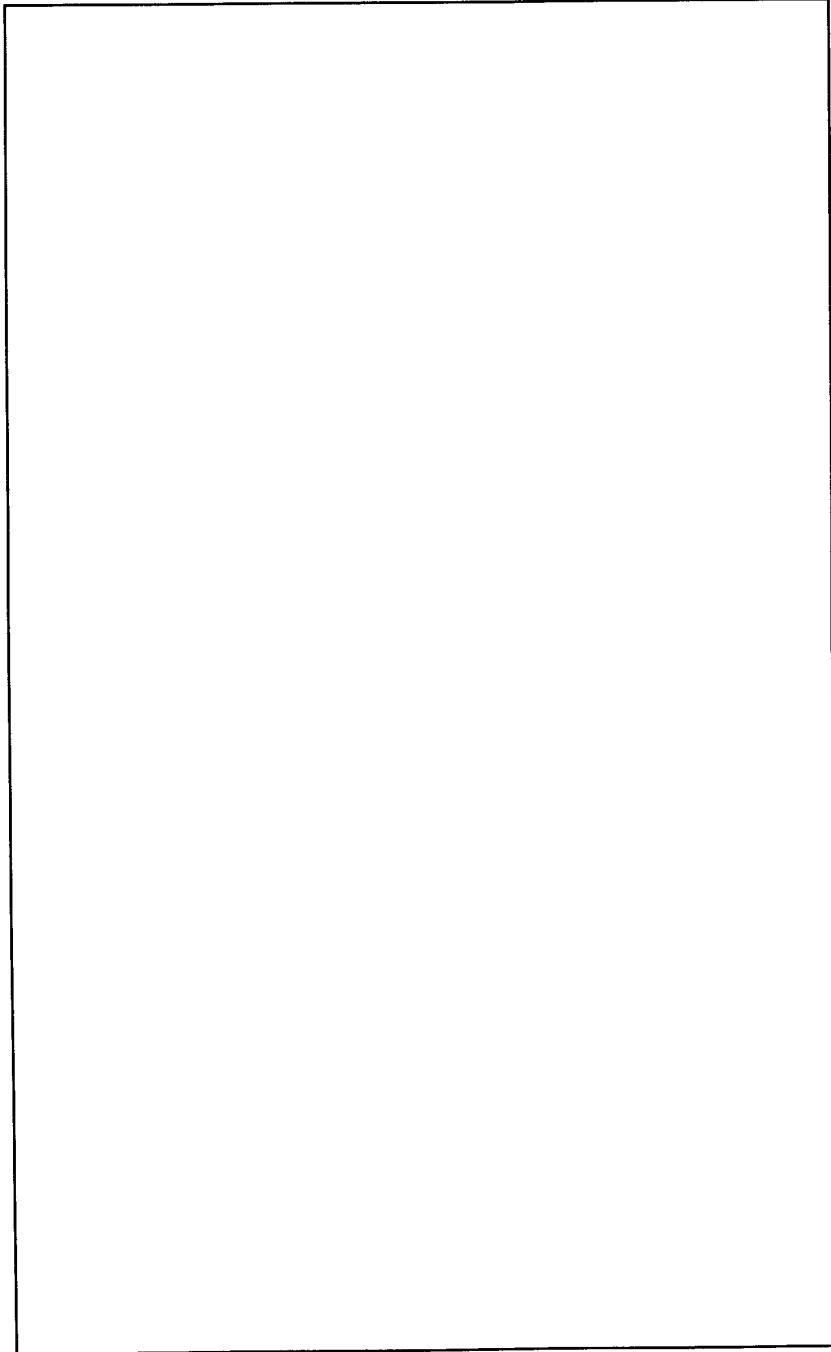


L8

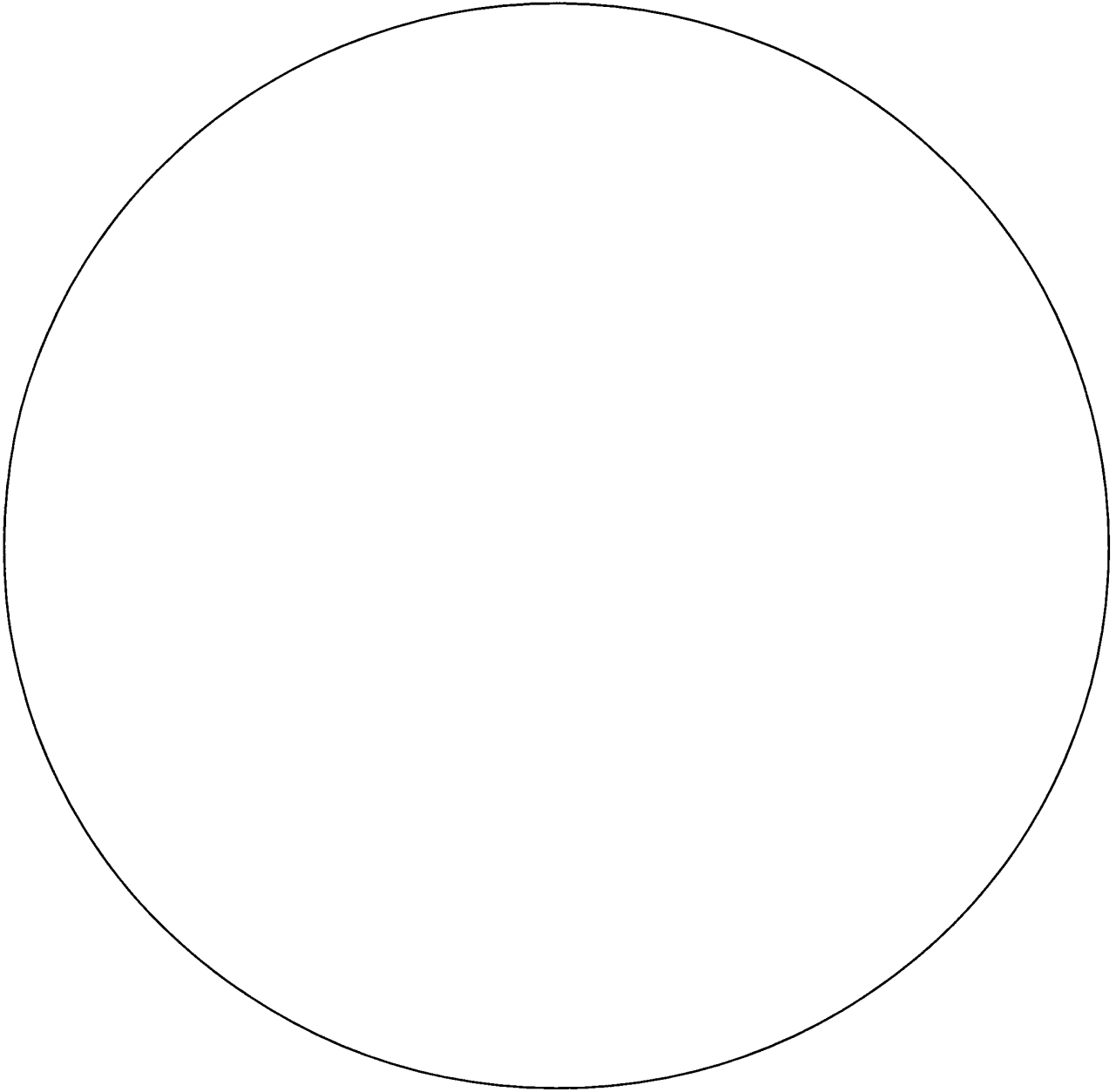


St. Louis University		Opposing Team		Win or Loss for St. Louis University
St. Louis U.	83	Illinois State	90	———— Lost by 7
St. Louis U.	68	Indiana State	84	
St. Louis U.	88	U. of Missouri (St. Louis)	89	
St. Louis U.	61	Detroit U.	69	
St. Louis U.	66	Oklahoma City	89	
St. Louis U.	65	Kansas	85	
St. Louis U.	80	Tulsa	77	———— Won by 3
St. Louis U.	74	U. of Missouri (St. Louis)	54	
St. Louis U.	78	Columbia U.	66	
St. Louis U.	83	Southern Illinois (Edwardsville)	63	
St. Louis U.	55	Cincinnati	66	
St. Louis U.	54	Marquette	56	
St. Louis U.	79	Georgia Tech.	92	
St. Louis U.	81	De Paul	100	
St. Louis U.	75	Florida State	88	
St. Louis U.	49	Georgia Tech.	57	
St. Louis U.	85	Memphis State	86	
St. Louis U.	68	Florida State	72	
St. Louis U.	65	Wisconsin- Milwaukee	64	
St. Louis U.	58	Southern Illinois (Carbondale)	60	
St. Louis U.	61	Louisville	63	
St. Louis U.	62	Cincinnati	80	
St. Louis U.	83	Tulane	79	
St. Louis U.	82	Memphis State	80	
St. Louis U.	75	Tulane	85	
St. Louis U.	59	Louisville	94	
St. Louis U.	57	Memphis State	79	

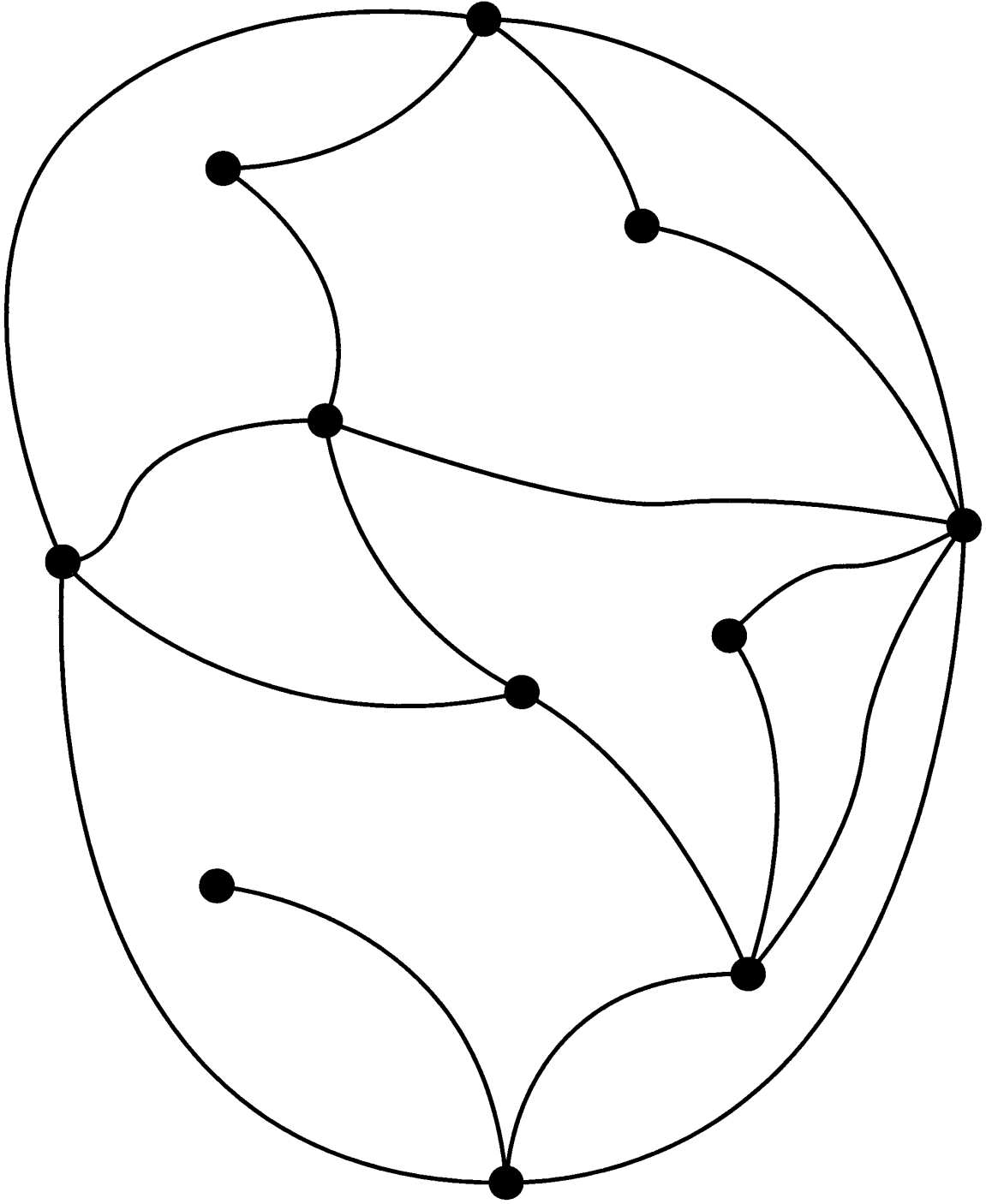
G2(a)



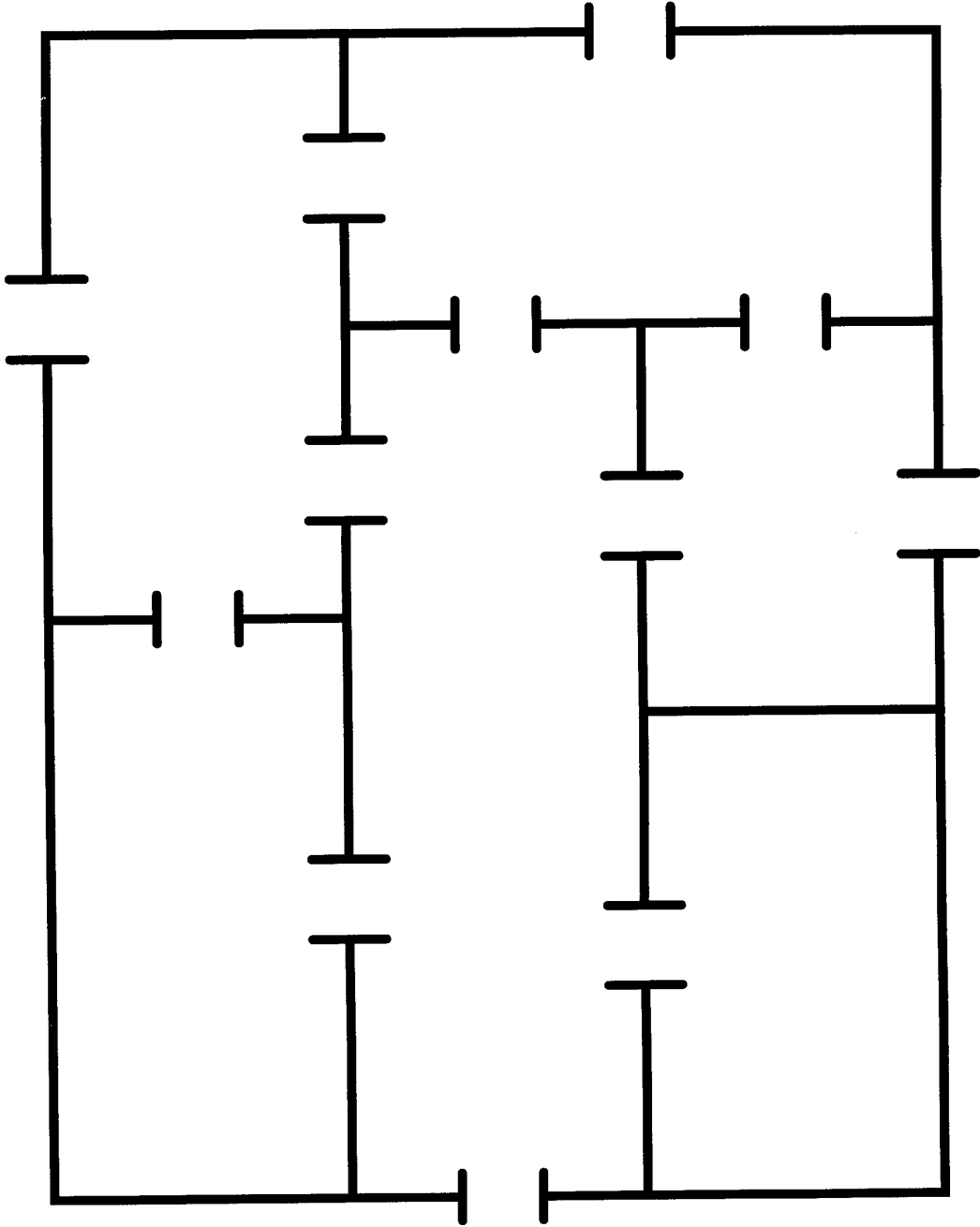
G2(b)



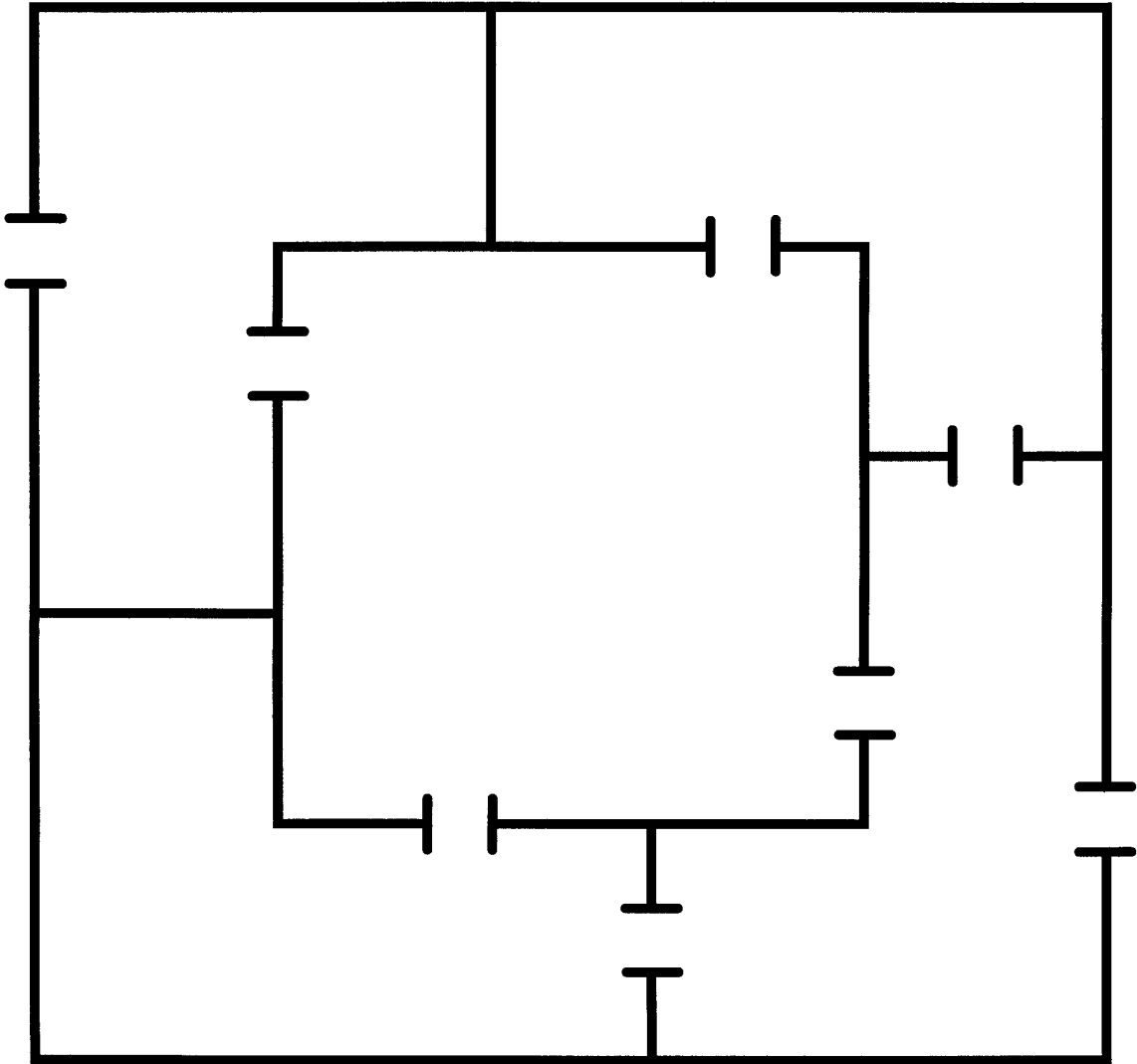
G7



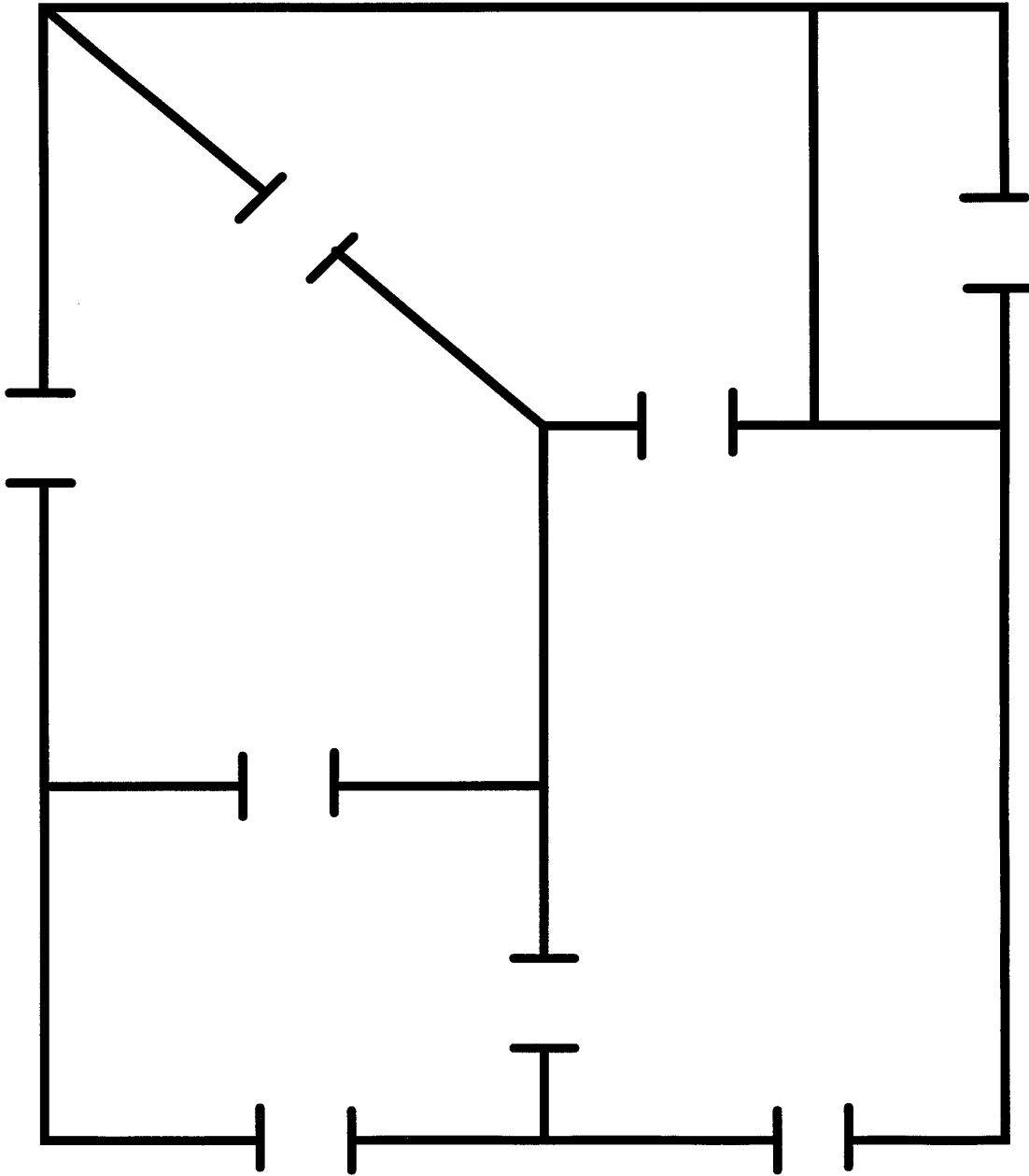
G8(a)



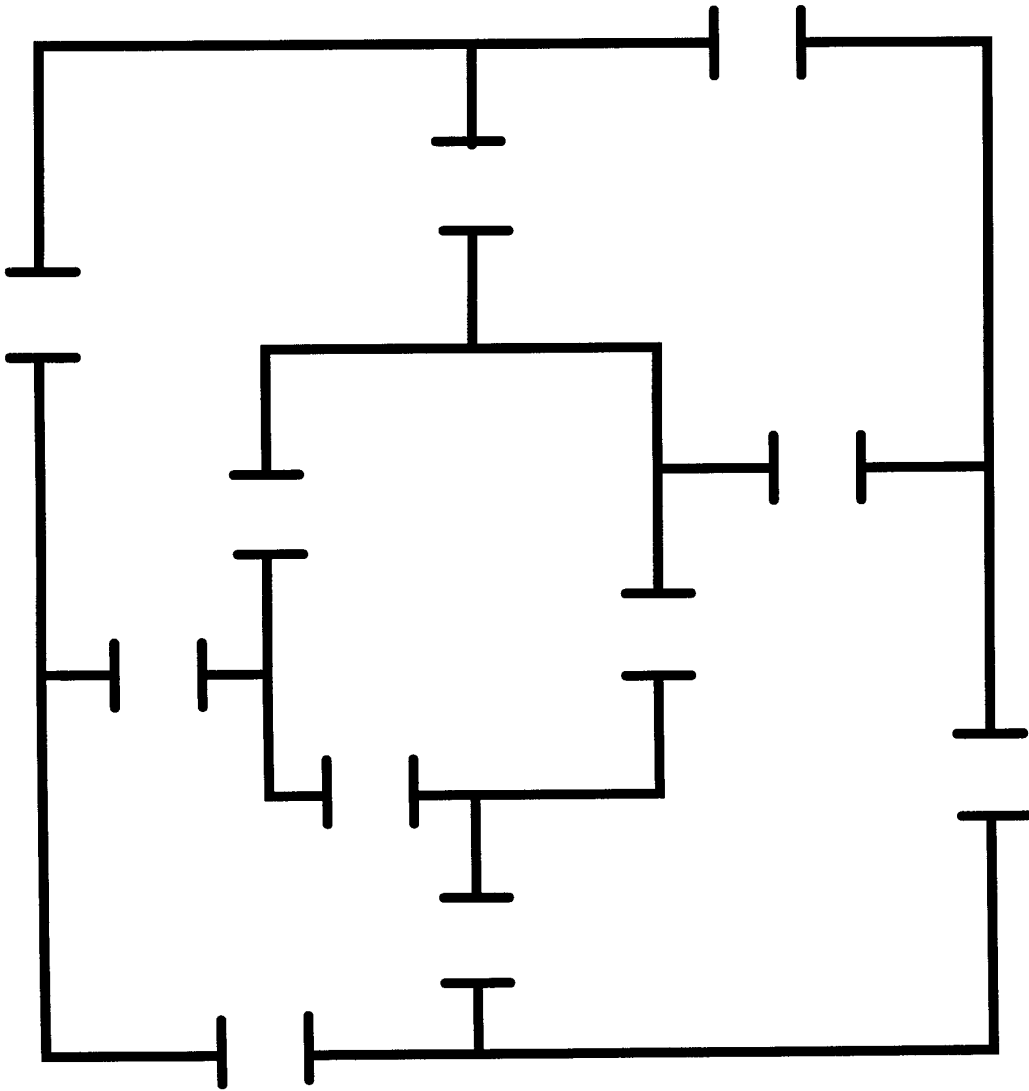
G8(b)



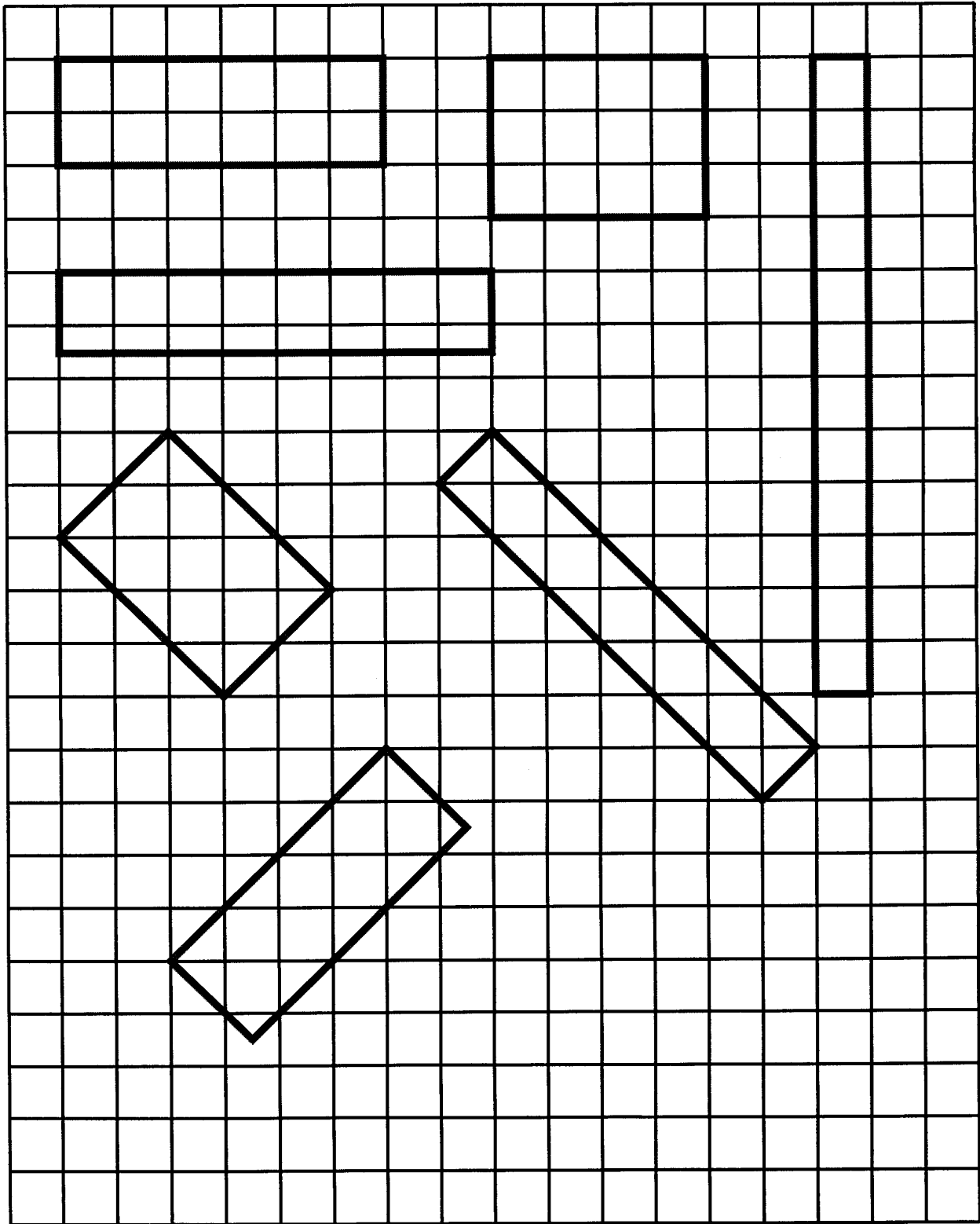
G9(a)



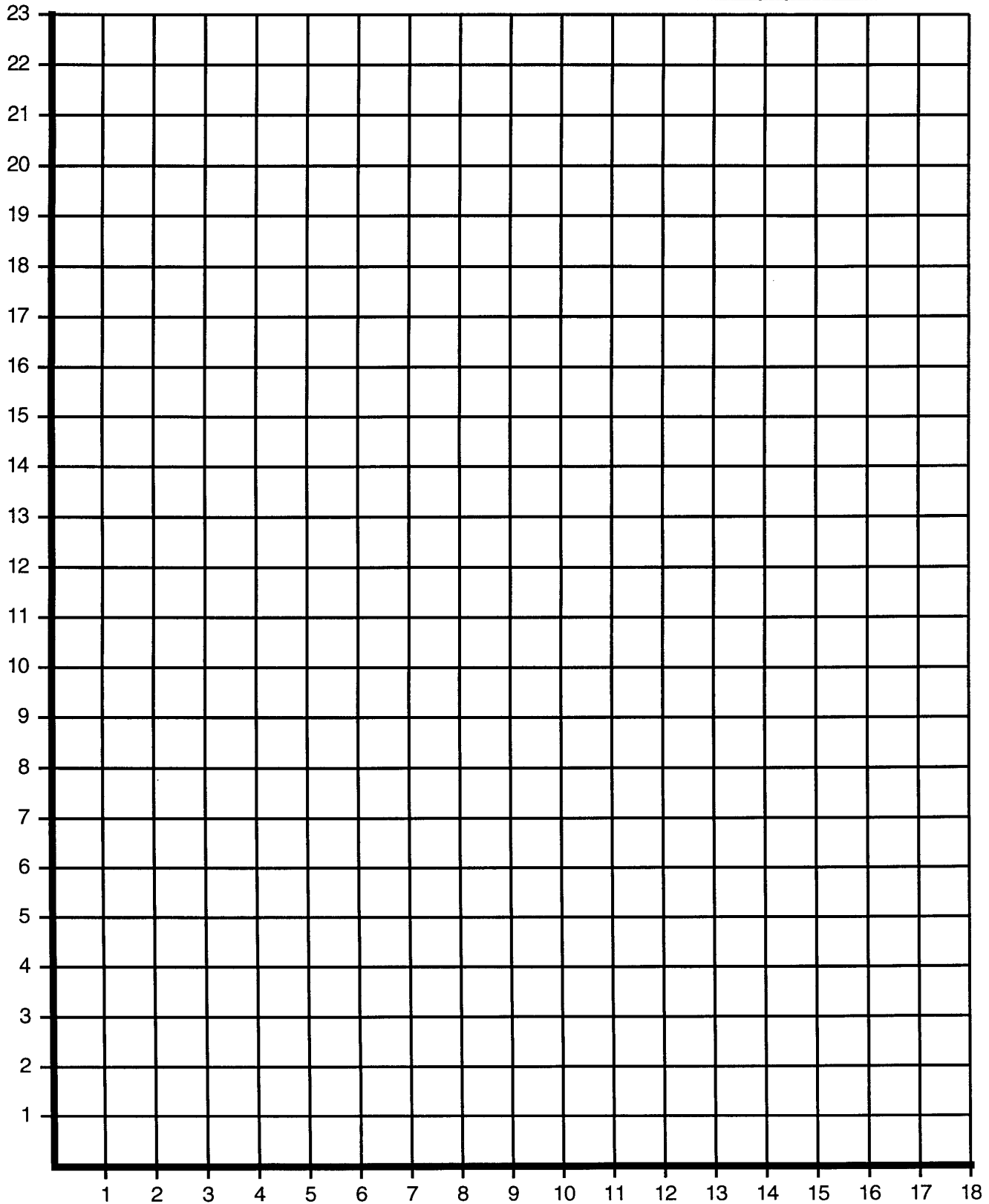
G9(b)



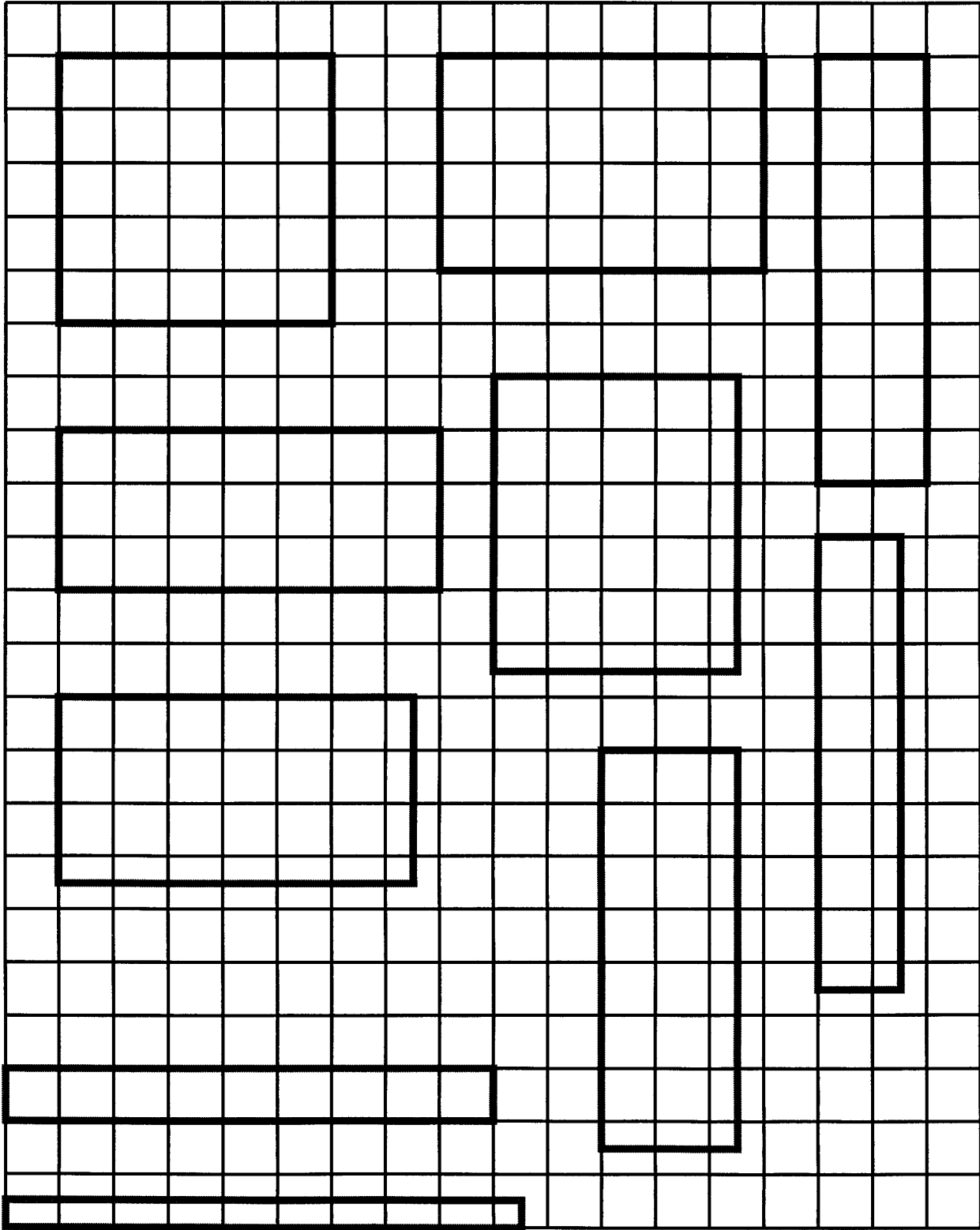
G10(a)



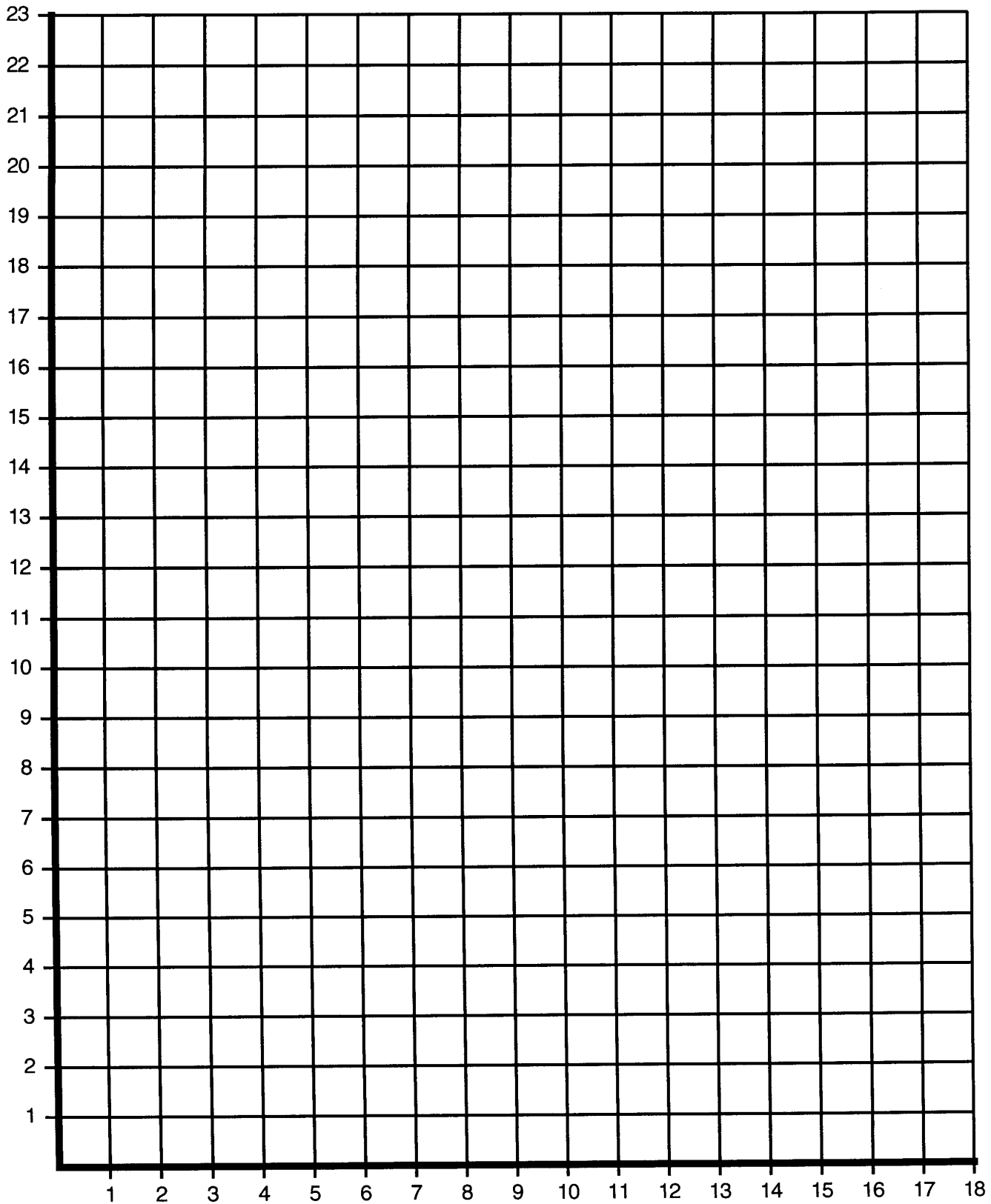
G10(b)



G11(a)

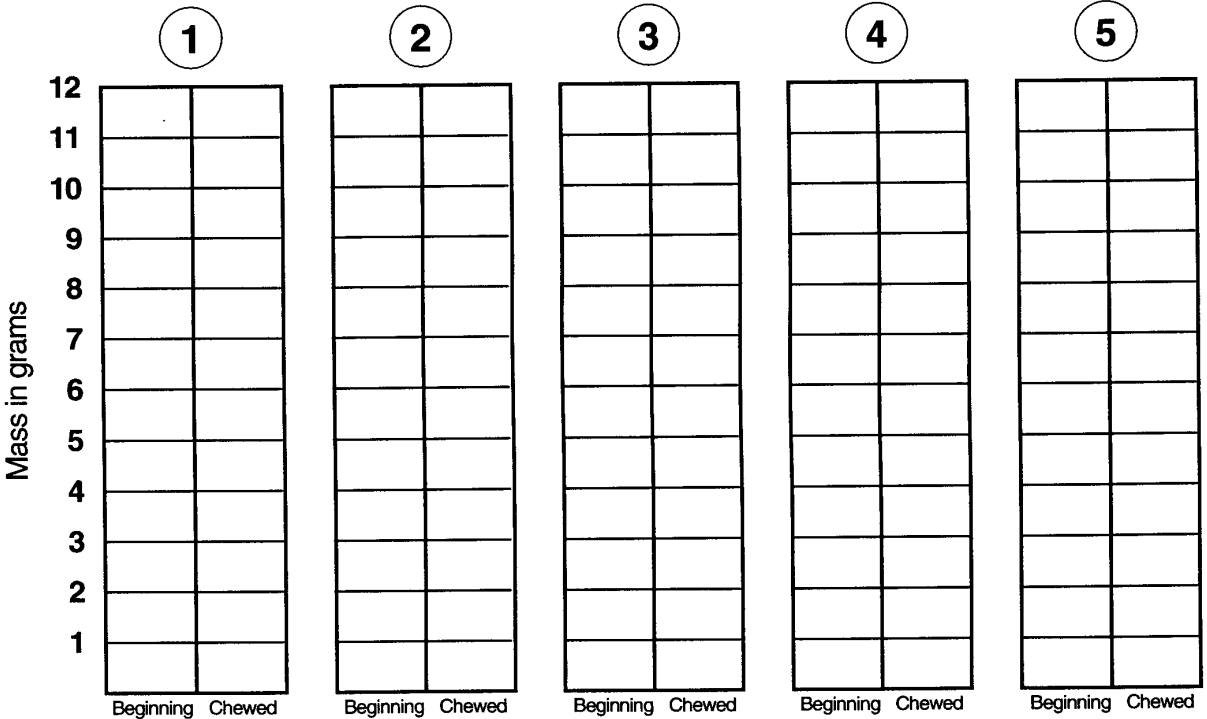


G11(b)



G13

	Mass		
	Beginning	Chewed	Loss
1			
2			
3			
4			
5			



W2(a)

Galaxy of Problems #1
(13-5908R)

Student Name _____
Date _____

		Responses
Arrows	p.2 (+4)	15 _____
	p.4 (+10, +1)	11 _____
	p.7 (+5, +2)	9 _____
	p.9 (-3, 2x)	8 _____
	p.11 (-10, -1, composition)	17 _____
	p.13 (-10, -1, composition)	8 _____
	p.19 (2x, 3x, 6x, composition)	17 _____
	p.21 (3x, +1)	15 _____
	p.22 (<, >)	7 _____
	p.28 (-100, -10, -1, composition)	9 _____
	p.29 (2x, +1, 4x, composition)	16 _____
	p.32 (10x, +1)	8 _____
Minicomputers	p.8 (@-checkers)	8 _____
	p.12 (positive, negative)	10 _____
	p.20 (decimals)	6 _____
	p.31 (positive, negative)	6 _____
Strings	p.5 (multiples of 4)	8 _____
	p.15 (multiples of 2, 3)	10 _____
Counting/Sequence (Number Lines)	p.3 ($\widehat{23}$ -203)	20 _____
Addition/Subtraction/Multiplication	p.6 (addition table)	26 _____
	p.10 (+, x)	8 _____
	p.14 (subtraction, multiplication tables)	16 _____
	p.18 (+, -, x, parentheses)	5 _____
	p.30 (missing addend)	4 _____
Geometry & Measurement	p.17 (length)	3 _____
	p.27 (area)	4 _____
Detective Stories	p.16 (+3, -4, even, multiples of 7)	13 _____
	p.24 (Minicomputer, multiples of 4, 10)	5 _____
	p.26 (+2, Minicomputer)	10 _____
Story Problems	p.23 (decimal operations)	6 _____
	p.25 (multiples, division)	2 _____

W2(b)

Dear Parent/Guardian:

With this letter, we are sending home your child's *Galaxy of Problems #1* Workbook. It contains pages with problems from various areas of our mathematics curriculum. During the past couple weeks, the students have been working independently in this booklet.

Please be aware that the workbook pages become progressively more difficult. Time constraints and individual understanding, skills, and experiences will influence how much of the booklet a student completes. We do not expect every student to complete every page, especially since the last one-third of the booklet is designed for extra challenge. You may wish to discuss pages that were difficult for your child or practice some of these concepts at home.

Other workbooks will be sent home later in the year. These should give you an idea of some of the topics and concepts being introduced in our mathematics curriculum as well as help you monitor your child's progress.

Sincerely,

			Responses
Arrows	p.2	(+100, +10, +1)	6 _____
	p.4	(+10)	17 _____
	p.6	(+1, +4)	24 _____
	p.8	(-10, -1, composition)	9 _____
	p.10	(-10, -5, -6, composition)	11 _____
	p.12	(10x, +1)	6 _____
	p.15	(2x, +2)	14 _____
	p.19	(2x, 3x, composition)	10 _____
	p.21	(4x)	19 _____
	p.22	(10x, +3)	7 _____
p.27	(10x, +1)	10 _____	
Minicomputers	p.7	(positive, negative)	10 _____
	p.9	(⊖-checkers)	10 _____
	p.18	decimals	6 _____
Addition/Subtraction/Multiplication	p.3	(addition, subtraction tables)	20 _____
	p.20	(addition table w/ negatives)	22 _____
	p.23	(+, -, x, parentheses)	6 _____
	p.29	(multiples of 8, 9, patterns)	30 _____
	p.31	(+, -, x, parentheses)	10 _____
	p.32	(-, problem solving)	8 _____
Money	p.14	(1¢, 5¢, 10¢, 25¢)	5 _____
Geometry & Measurement	p.5	(one-half, one-third)	6 _____
	p.24	(taxi-geometry)	16 _____
	p.25	(area)	3 _____
	p.28	(length)	2 _____
Detective Stories	p.13	(+3, Minicomputer)	10 _____
	p.17	(Minicomputer, multiples of 3, 4)	5 _____
	p.30	(less than, Minicomputer)	3 _____
Story Problems	p.11	(order, addition, division)	8 _____
	p.16	(multiplication)	15 _____
	p.26	(decimal addition)	2 _____

Responses

Arrows	p.2	(-10, -1, composition)	8	_____
	p.5	(missing labels)	4	_____
	p.7	(+5, -1, +4, composition)	18	_____
	p.11	(2x, 3x, composition)	12	_____
	p.14	(2x, +1)	5	_____
	p.16	(2x, +4, +□)	10	_____
	p.20	(10x, +1, -1)	4	_____
	p.24	(+9, 2x)	8	_____
	p.27	($\frac{1}{2}x$, +10, +□)	10	_____
p.29	($\frac{1}{3}x$)	14	_____	

Minicomputers	p.4	(5x)	10	_____
	p.17	(positives and negatives)	5	_____
	p.31	(transforming a number)	5	_____

Strings	p.12	(<10, multiples of 3)	8	_____
	p.30	(multiples of 4 and 5)	6	_____
	p.32	(A-Block Game)	2	_____

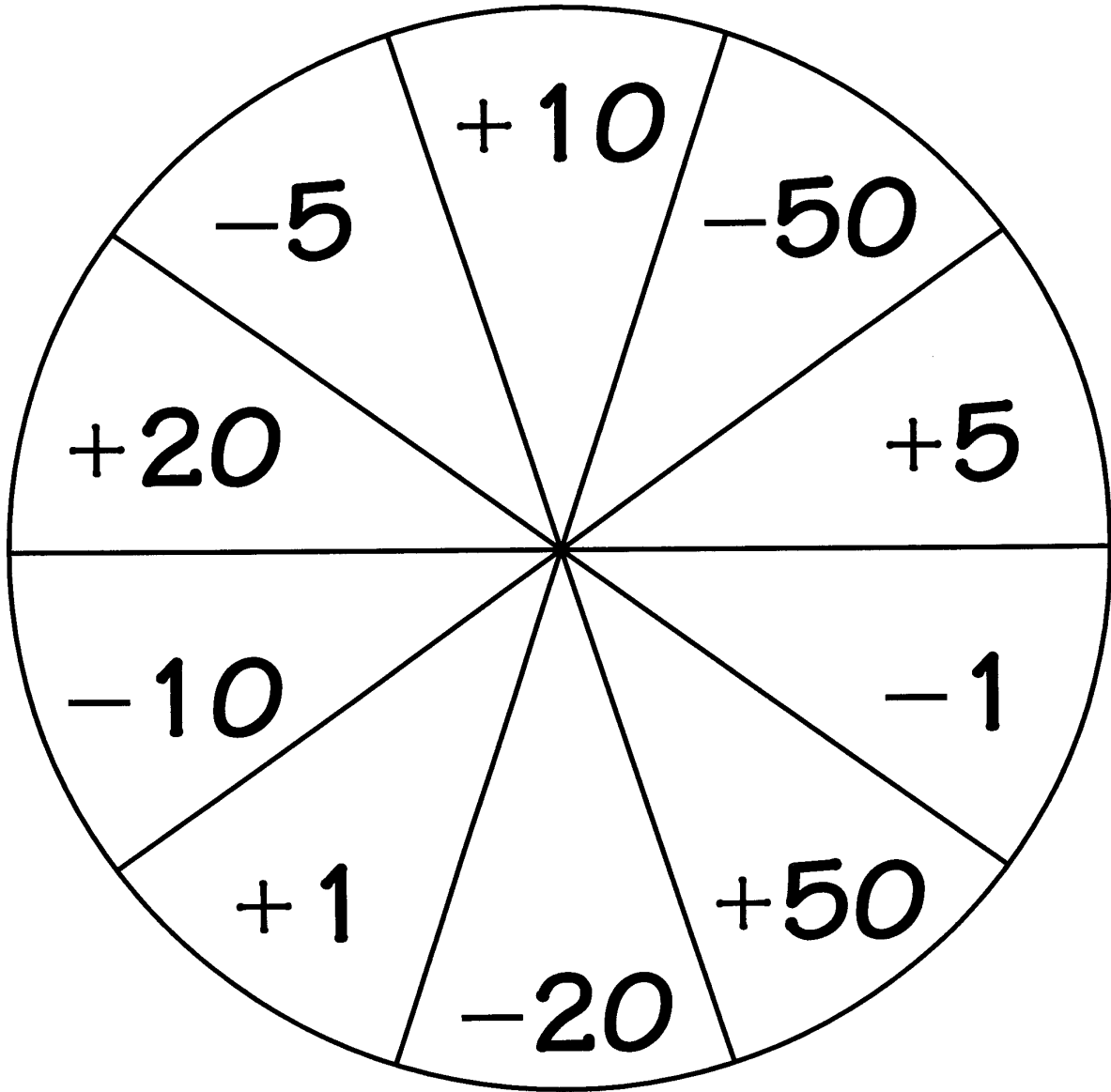
Calculations	p.6	(frames)	16	_____
	p.9	(sharing equally)	7	_____
	p.10	(subtraction)	18	_____
	p.19	(addition)	6	_____
	p.22	(⊕, open sentences)	15	_____
p.25	(parentheses, +, -, x)	5	_____	

Geometry/Masurement	p.3	(one-third)	6	_____
	p.15	(length)	4	_____
	p.18	(one-half)	10	_____
	p.26	(area)	3	_____

Detective Stories	p.8	(Minicomputer, even)	5	_____
	p.28	(taxi-distance)	1	_____

Story Problems	p.13	(estimation, difference)	6	_____
	p.21	(addition w/ decimals)	2	_____
	p.23	(various)	4	_____

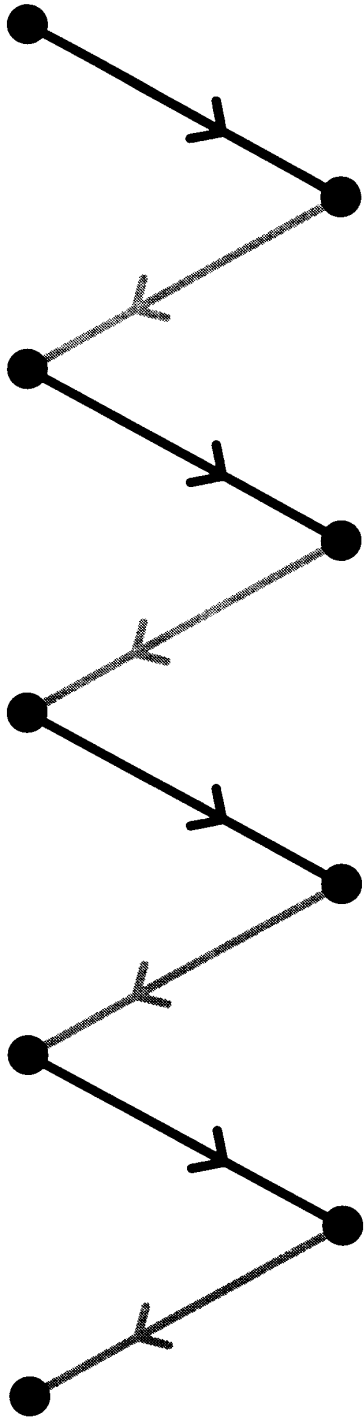
W11

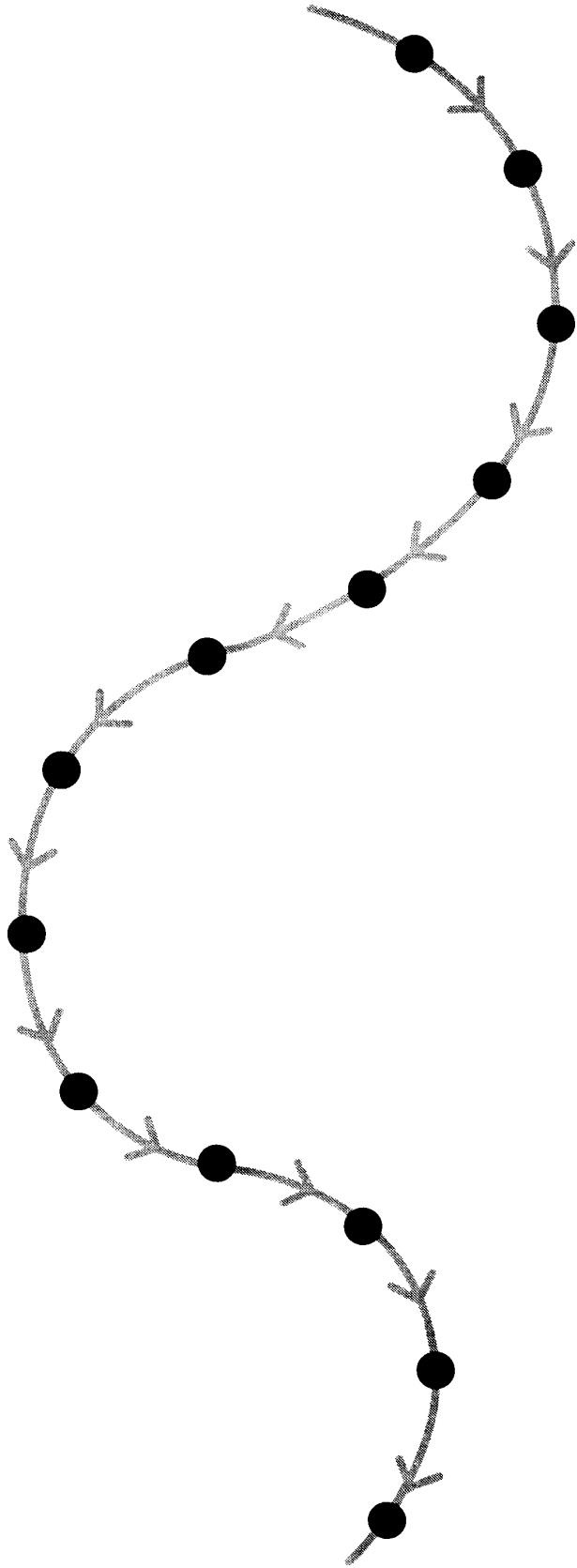


			Responses
Arrows	p.2	(+10, -1)	4 _____
	p.4	(2x, +3)	8 _____
	p.8	(2x, 8x, composition)	16 _____
	p.11	(10x, +1)	4 _____
	p.12	(-5, -10, composition)	26 _____
	p.16	(2x, 3x, composition)	12 _____
	p.25	(2x, 4x, 8x, composition)	15 _____
	p.29	(x3, +29, +2, -30. return arrows)	8 _____
Minicomputers	p.7	(@-checkers and 10x facts)	13 _____
	p.30	(transforming a number)	6 _____
Strings	p.13	(6 in ones, tens, hundreds place)	8 _____
	p.22	(multiples of 3 and 5)	6 _____
	p.31	(A-Block String Game)	2 _____
Addition and Subtraction	p.5	(subtraction table)	15 _____
	p.17	(subtraction patterns)	9 _____
	p.26	(missing addend)	4 _____
	p.32	(spinner game)	6 _____
Multiplication and Division	p.9	(x, +, parentheses)	6 _____
	p.20	(share three ways)	9 _____
	p.23	(story problems w/+ and +)	3 _____
	p.27	(talkative numbers)	9 _____
	p.28	(story problems w/ +, -, x, ÷)	4 _____
Fractions	p.6	(area $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{2}$ equiv. fractions)	3 _____
	p.19	(area, $\frac{1}{2}$, $\frac{3}{4}$, $\frac{2}{3}$)	3 _____
Area	p.10	(2cm ² , make 14 cm ²)	4 _____
	p.14	(rectangles 16 cm ²)	3+ _____
Money	p.15	(1¢, 5¢, 10¢, 25¢)	5 _____
	p.24	(number line)	7 _____
Detective Stories	p.3	(Minicomputer, multiples of 5)	5 _____
	p.18	(+2 arrows, Minicomputer)	12 _____
	p.21	(Minicomputer, strings, +4 arrows)	16 _____

Responses

Arrows	p.2	(+10)	8	_____
	p.4	(2x)	8	_____
	p.6	(more than)	3	_____
	p.9	(+3, +5)	8	_____
	p.13	(+5, -2)	7	_____
	p.15	(-4)	8	_____
	p.18	(2x, +10)	10	_____
	p.23	(10x, ÷2)	6	_____
	p.25	(+29, -56)	6	_____
	p.29	(2x, 3x)	11	_____
p.31	(+2, -107, x3, +48)	5	_____	
<hr/>				
Minicomputers	p.3	(10-100)	8	_____
	p.5	(@-checkers)	8	_____
	p.8	(pos. and neg. checkers)	8	_____
	p.12	(pos. and neg. checkers)	8	_____
<hr/>				
Strings	p.11	(more than 100, odd)	8	_____
	p.30	(multiples of 8 and 6)	8	_____
	p.32	(mult. of 4 and 10, less than 50)	11	_____
<hr/>				
Subtraction and Multiplication	p.10	(subtraction table)	11	_____
	p.14	(subtraction w/ two & three digits)	6	_____
	p.22	(multiplication table)	9	_____
	p.27	(talkative numbers)	8	_____
<hr/>				
Length and Area	p.16	(4 cm ² grid squares)	6	_____
	p.20	(2 cm grid)	4	_____
	p.24	(fractional parts)	5	_____
	p.26	(area & perimeter of rectangles)	8	_____
<hr/>				
Story Problems	p.7		5	_____
	p.17	(equivalences)	6	_____
	p.19	(place value)	5	_____
	p.28	(decimals)	7	_____





0–109 Numeral Chart

0	1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18	19
20	21	22	23	24	25	26	27	28	29
30	31	32	33	34	35	36	37	38	39
40	41	42	43	44	45	46	47	48	49
50	51	52	53	54	55	56	57	58	59
60	61	62	63	64	65	66	67	68	69
70	71	72	73	74	75	76	77	78	79
80	81	82	83	84	85	86	87	88	89
90	91	92	93	94	95	96	97	98	99
100	101	102	103	104	105	106	107	108	109

Multiplication Table

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

