

Name: \_\_\_\_\_

**Unit 2: Introduction to Algebra**

**Lessons 1-3 Review Worksheet**

**I. Variables and Expressions**

Evaluate each expression to find the missing values in the tables.

1.

<b>y</b>	<b><math>23 + y</math></b>
<b>17</b>	
<b>27</b>	
<b>37</b>	

2.

<b>w</b>	<b><math>3w + 10</math></b>
<b>4</b>	
<b>5</b>	
<b>6</b>	

3. Stephanie's CD holder holds 6 CDs per page. How many CDs does Stephanie have if she fills 2, 3, 4, or 5 pages? Make and complete a table for 2, 3, 4, 5, and  $x$  pages. Write an expression for  $x$  pages.

## II. Translating Between Words and Math

4. The small and large intestines are part of the digestive system. They are named for their diameter not their length. The small intestine is longer than the large intestine. Let  $n$  represent the length in feet of the small intestine. The large intestine is 5 feet long. Write an expression to show much longer the small intestine is than the large intestine.

5. Let  $h$  represent the number of times your heart beats in 1 minute. Write an expression for the total number of times it beats in 1 hour. (Hint: 1 hour = 60 minutes)

Write each phrase as a numerical or algebraic expression.

6. 719 plus 210

7.  $t$  multiplied by 7

8. The sum of  $n$  and 51

\_\_\_\_\_

Write two phrases for each expression.

9.  $n + 9$

\_\_\_\_\_

\_\_\_\_\_

10.  $12 \times 13$

\_\_\_\_\_

\_\_\_\_\_

11.  $72 - x$

\_\_\_\_\_

\_\_\_\_\_

12.  $\frac{x}{12}$

\_\_\_\_\_

\_\_\_\_\_

13.  $15s$

\_\_\_\_\_

\_\_\_\_\_

### III. Translating Between Tables and Expressions

Write an expression for the missing value in the table.

14.

Position	1	2	3	4	5	n
Value of Term	8	16	24	32	40	

Make a table for each sequence. Then write an expression for the sequence

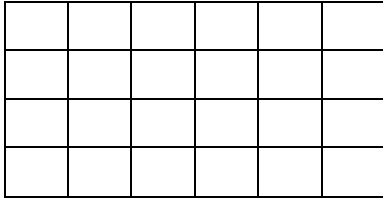
15. 3, 4, 5, 6, ....

16. 4, 7, 10, 13, ....

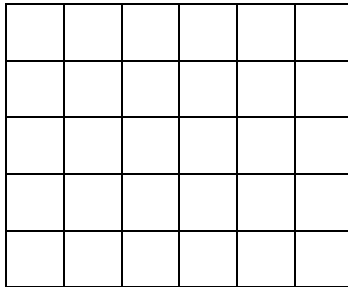
#### IV. Exploring Area and Perimeter

17. Sarita is digging rectangular vegetable gardens. She had four different designs she is going to create and has sketched them on graph paper. To prevent weeds from growing, she will cover each garden with a mesh sheet (area) the exact size of the garden before planting the vegetables. She will also place a weed-barrier fence (perimeter) around each garden. Copy and complete the table to find the size of the sheet and the length of the fence she will need for each garden.

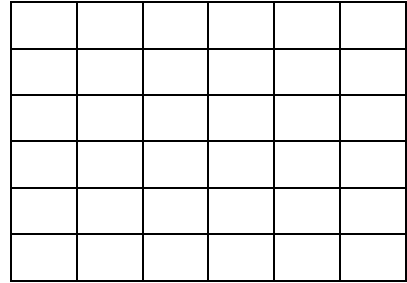
Garden A



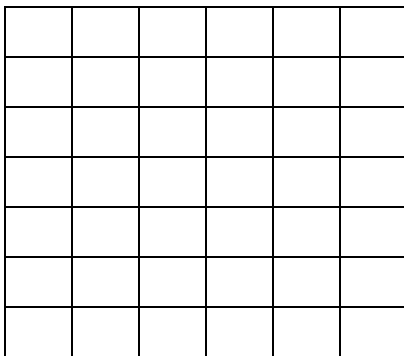
Garden B



Garden C



Garden D



Garden	Length ( $l$ )	Width ( $w$ )	Area ( $A$ )	Perimeter ( $P$ )
A				
B				
C				
D				