

Graphing Functions

Function _____

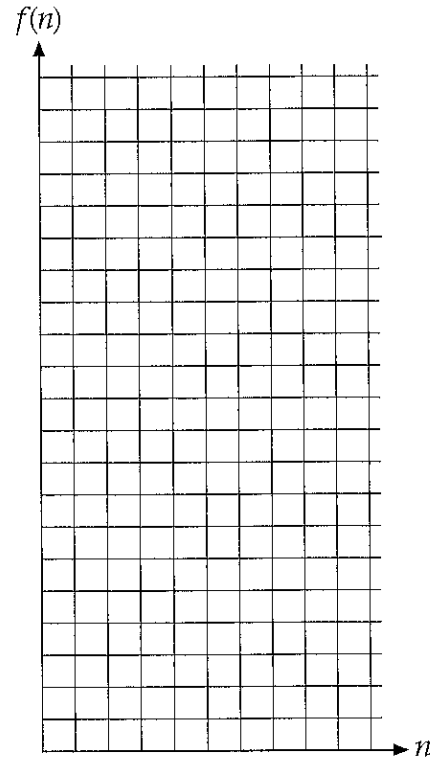
n	$f(n)$
1	
2	
3	
4	
5	
⋮	
17	
n	

Function _____

n	$f(n)$
1	
2	
3	
4	
5	
⋮	
17	
n	

Function _____

n	$f(n)$
1	
2	
3	
4	
5	
⋮	
17	
n	



Function _____

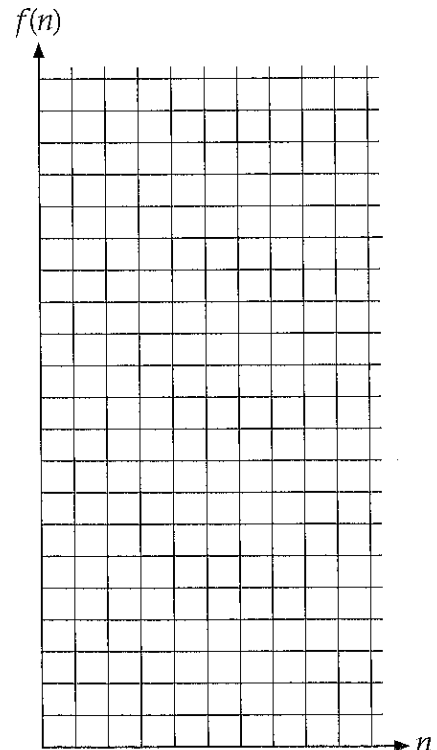
n	$f(n)$
1	
2	
3	
4	
5	
⋮	
17	
n	

Function _____

n	$f(n)$
1	
2	
3	
4	
5	
⋮	
17	
n	

Function _____

n	$f(n)$
1	
2	
3	
4	
5	
⋮	
17	
n	



Graphing Functions

Function _____

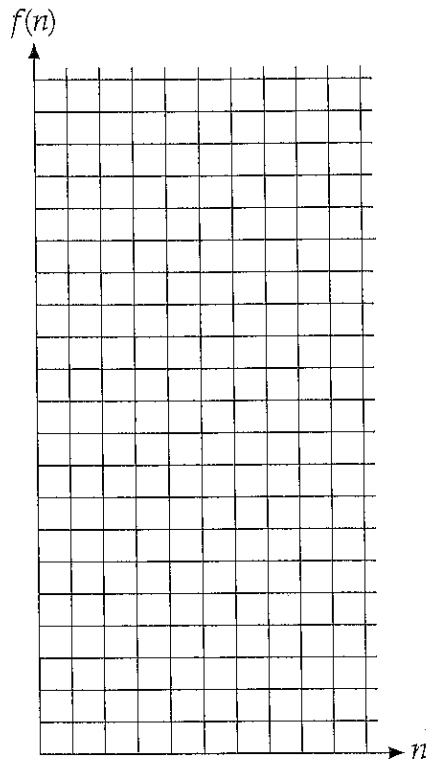
n	$f(n)$
1	
2	
3	
4	
5	
⋮	
17	
n	

Function _____

n	$f(n)$
1	
2	
3	
4	
5	
⋮	
17	
n	

Function _____

n	$f(n)$
1	
2	
3	
4	
5	
⋮	
17	
n	



Function _____

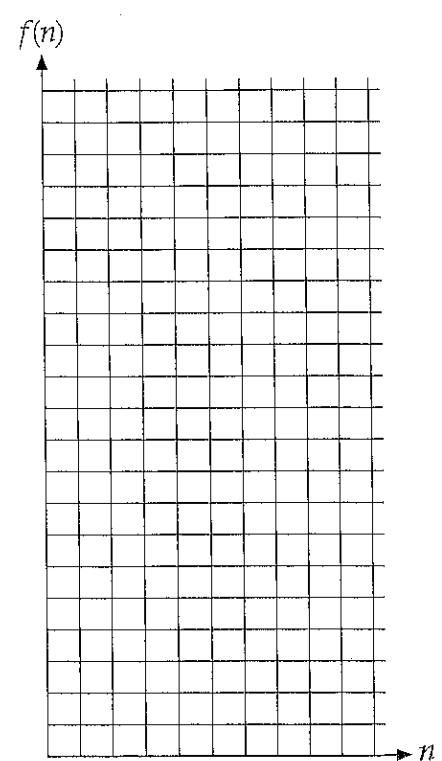
n	$f(n)$
1	
2	
3	
4	
5	
⋮	
17	
n	

Function _____

n	$f(n)$
1	
2	
3	
4	
5	
⋮	
17	
n	

Function _____

n	$f(n)$
1	
2	
3	
4	
5	
⋮	
17	
n	



Graphing Functions

Construct a T-table for each of these functions from Homework 1: Exploring Patterns. Then graph each function on the grid. Determine the value of the function at step 0 and put this in the table too.

Function 1

n	$f(n)$
1	
2	
3	
4	
5	
⋮	
10	
⋮	
17	
n	

Function 2

n	$f(n)$
1	
2	
3	
4	
5	
⋮	
10	
⋮	
17	
n	

Function 3

n	$f(n)$
1	
2	
3	
4	
5	
⋮	
10	
⋮	
17	
n	

Function 4

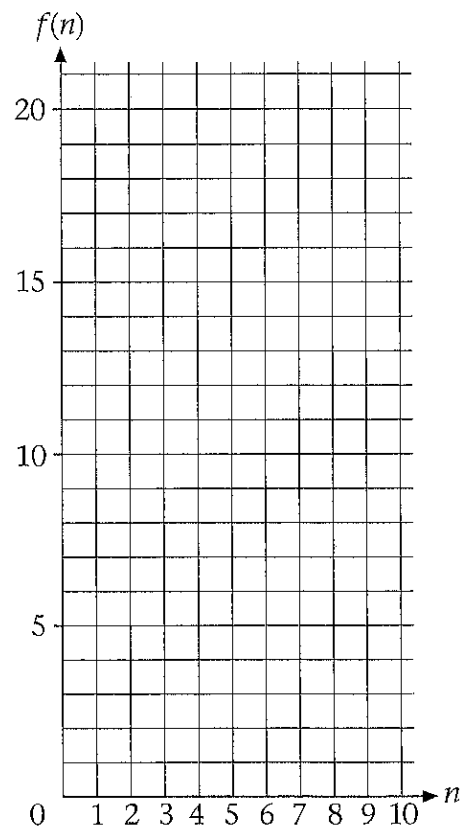
n	$f(n)$
1	
2	
3	
4	
5	
⋮	
10	
⋮	
17	
n	

Function 5

n	$f(n)$
1	
2	
3	
4	
5	
⋮	
10	
⋮	
17	
n	

Function 6

n	$f(n)$
1	
2	
3	
4	
5	
⋮	
10	
⋮	
17	
n	



HOMEWORK 2 (Continued)

Construct a T-table for each of these functions from Homework 1: Exploring Patterns. Then graph each function on the grid. Determine the value of the function at step 0 and put this in the table too.

Function 11

n	$f(n)$
1	
2	
3	
4	
5	
⋮	
10	
⋮	
17	
n	

Function 12

n	$f(n)$
1	
2	
3	
4	
5	
⋮	
10	
⋮	
17	
n	

Function 13

n	$f(n)$
1	
2	
3	
4	
5	
⋮	
10	
⋮	
17	
n	

Function 14

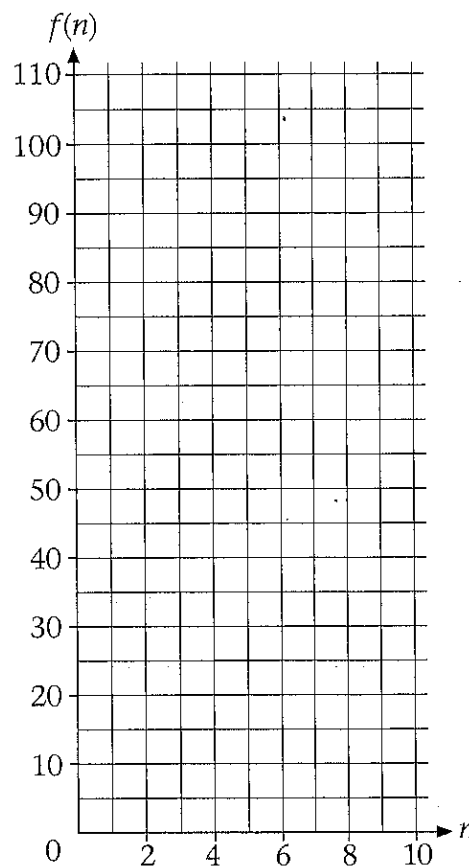
n	$f(n)$
1	
2	
3	
4	
5	
⋮	
10	
⋮	
17	
n	

Function 15

n	$f(n)$
1	
2	
3	
4	
5	
⋮	
10	
⋮	
17	
n	

Function 16

n	$f(n)$
1	
2	
3	
4	
5	
⋮	
10	
⋮	
17	
n	



Working Backward

Below are ten functions and six pictures. Below each pictorial representation, write the letter of the matching function. On the back of this sheet, design a pictorial representation for the four functions that are not pictured. Label them with their functions.

a. $f(n) = 4n - 3$

e. $f(n) = 2n + 3$

h. $f(n) = 6n - 5$

b. $f(n) = 3n + 2$

f. $f(n) = 4n + 4$

i. $f(n) = 6n - 1$

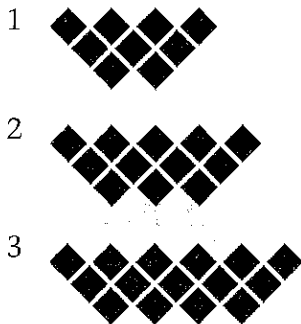
c. $f(n) = 2n + 2$

g. $f(n) = 3n + 6$

j. $f(n) = 6n + 2$

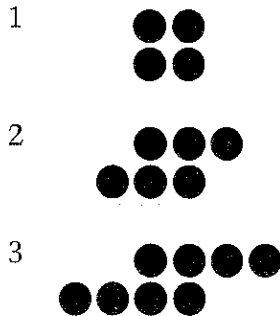
d. $f(n) = 4n + 1$

1. count squares



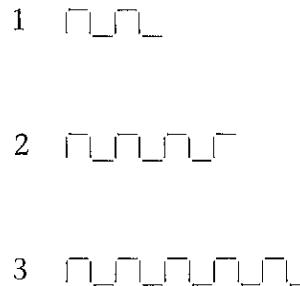
Function _____

2. count circles



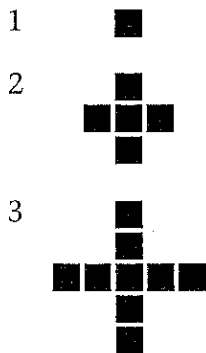
Function _____

3. count toothpicks



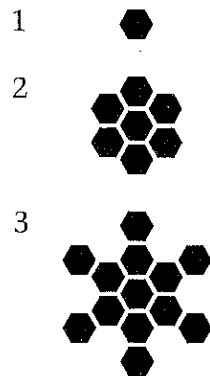
Function _____

4. count squares



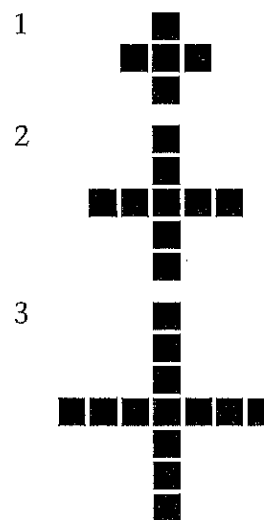
Function _____

5. count hexagons



Function _____

6. count squares



Function _____

Working Backward

Below are nine functions. For each one, design a pictorial representation and show three steps. Use polygons, lines, toothpicks, dots, or other shapes. Be creative.

<p>1. $f(n) = 2n + 1$</p>	<p>2. $f(n) = 2n$</p>	<p>3. $f(n) = 4n + 2$</p>
<p>4. $f(n) = 4n$</p>	<p>5. $f(n) = 4n + 4$</p>	<p>6. $f(n) = 5n + 3$</p>
<p>7. $f(n) = 2n + 3$</p>	<p>8. $f(n) = 3n + 2$</p>	<p>9. $f(n) = 2n - 1$</p>