

# M9 - 6.1 - Patterns Word Problems HW

The following Diagrams are made out of Toothpicks. Draw another Diagram.



Create a Table of Values for Diagrams 1-5.


Write Let Statements

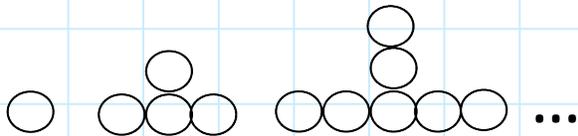
Find the Equation

How many Toothpicks in the 8th Diagram?

Which Diagram has 21 Toothpicks?

The following Diagrams are made out of Circles.

Draw another Diagram.



Create a Table of Values for Diagrams 1-5.


Write Let Statements

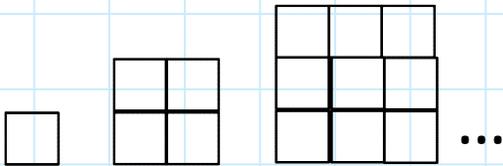
Find the Equation

How many Toothpicks in the 7th Diagram?

Which Diagram has 31 Circles?

# M9 - 6.1 - Patterns Word Problems HW

The following Diagrams are made out of Squares. Draw another Diagram.



Write Let Statements

Find the Equation

How many Toothpicks in the 8th Diagram?

Which Diagram has 21 Toothpicks?

Create a Table of Values for Diagrams 1-5.


# M9 - 6.1 - Patterns Word Problems HW

The following Diagrams are made out of Dots.

Draw another Diagram.

Create a Table of Values for Diagrams 1-5.



Write Let Statements

Find the Equation

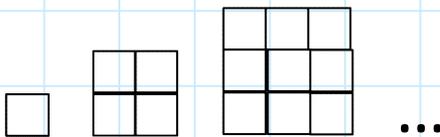
How many Dots in the 9th diagram?

Which Diagram has 21 toothpicks?


The following Diagrams are made out of Toothpicks.

Draw another Diagram.

Create a Table of Values for Diagrams 1-5.



Write Let Statements

Find the Equation

How many Toothpicks in the 9th Diagram?

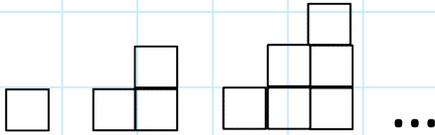
Which Diagram has 144 Toothpicks?


# M9 - 6.1 - Patterns Word Problems HW

The following Diagrams are made out of Dots.

Draw another Diagram.

Create a Table of Values for Diagrams 1-5.



Write Let Statements

Find the Equation

How many Dots in the 15th diagram?

Which Diagram has 108 toothpicks?


# M9 - 6.2 - Linear Patterns HW

Write an equation relating  $t$  to  $n$ .

$n$	$t$
1	2
2	3
3	4
4	5

$n$	$t$
1	0
2	1
3	2
4	3

$n$	$t$
1	3
2	6
3	9
4	12

$n$	$t$
1	3
2	5
3	7
4	9

$n$	$t$
1	4
2	7
3	10
4	13

$n$	$t$
1	2
2	6
3	10
4	14

$n$	$t$
1	-2
2	-4
3	-6
4	-8

$n$	$t$
1	0
2	-1
3	-2
4	-3

$n$	$t$
1	-1
2	-3
3	-5
4	-7

# M9 - 6.2 - Linear Patterns HW

Write an equation relating  $t$  to  $n$ .

$n$	$t$
1	
2	
3	
4	

$n$	$t$
1	
2	
3	
4	

$n$	$t$
1	
2	
3	
4	

$n$	$t$
1	
2	
3	
4	

$n$	$t$
1	
2	
3	
4	

$n$	$t$
1	
2	
3	
4	

$n$	$t$
1	
2	
3	
4	

$n$	$t$
1	
2	
3	
4	

$n$	$t$
1	
2	
3	
4	

# M9 - 6.2 - Curve Patterns HW

Write an equation relating  $t$  to  $n$ .

$n$	$t$
1	
2	
3	
4	

$n$	$t$
1	
2	
3	
4	

$n$	$t$
1	
2	
3	
4	

$n$	$t$
1	
2	
3	
4	

$n$	$t$
1	
2	
3	
4	

$n$	$t$
1	
2	
3	
4	

$n$	$t$
1	
2	
3	
4	

$n$	$t$
1	
2	
3	
4	

$n$	$t$
1	
2	
3	
4	