Grade 6 Math

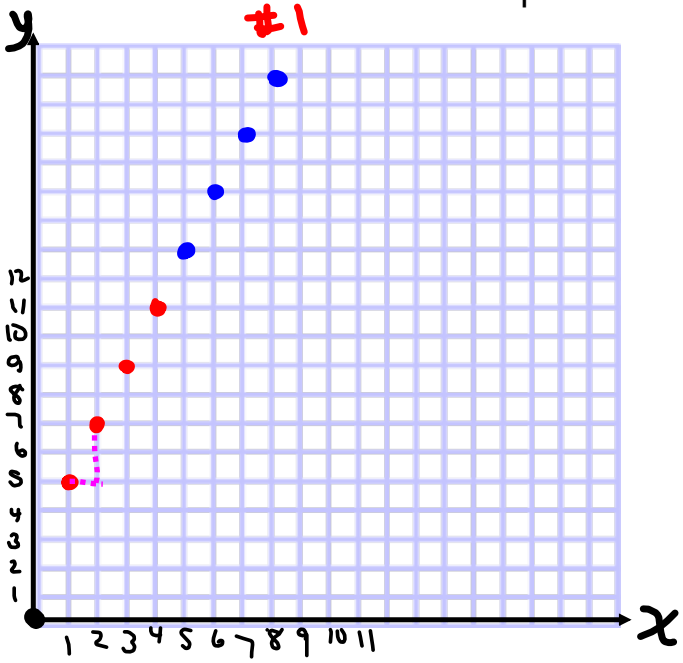
Date:_____

Test on chapter 1-patterns on TUESDAY Nov. 6

1) Use grid paper. graph each table. Describe the relationship shown on the graph

x	y
1	5
2	7
3	9
4	11

over 1, 2 up



As x increases by 1, y increases by 2, (Same as table)

up 2

over 1

Homework Solutions

Practice

TIP

1. Record each pattern in a table. Then draw a graph to represent the pattern. Explain how the graph represents the pattern.

a)

b)

c)

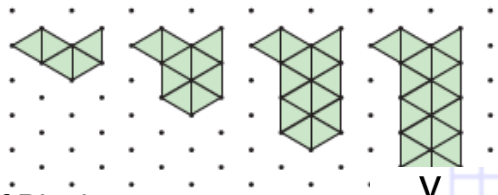


figure #	# of Blocks	Ordered pair
1	1	(1,1)
2	2	(2,2)
3	3	(3,3)
4	4	(4,4)

#1a

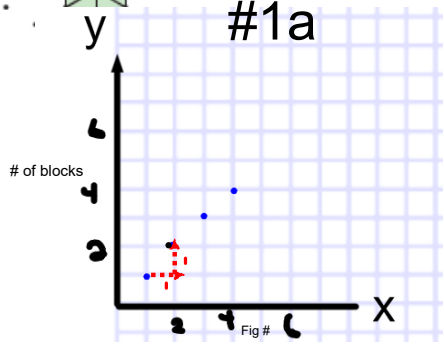


figure #	# of circle	Ordered pair
1	4	(1,4)
2	7	(2,7)
3	10	(3,10)
4	13	(4,13)

#1b

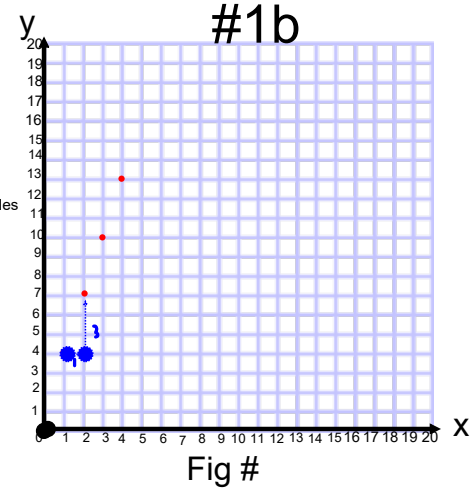
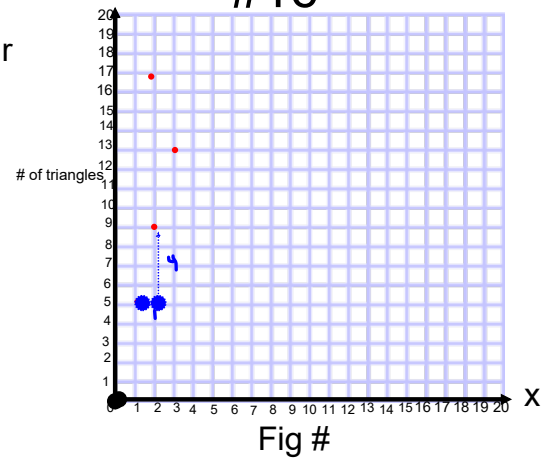


figure #	# of triangles	Ordered pair
1	5	(1,5)
2	9	(2,9)
3	13	(3,13)
4	17	(4,17)

#1c



Discrete & Continuous

Continuous Data (Connect)

When given a graph sometimes you can connect the dots. This is continuous.

Continuous Data can take any value

Ex) The height of a person

Discrete Data (Dots)

Discrete Data can only take certain values. (Not connected, just dots)

ex) Number of people who attend a dance

How do you decide?

Ask yourself if you can have half or part of the object in problem

Can have part of a height (6.5 feet)

BUT

Cannot have half a person at a dance

Let's try Continuous or Discrete

Would you use a line graph or a series of points to display each set of data?

Explain your choices

a) The area of house

A connected

Yes because I can have part of a unit area

Ex) $2.3cm^2$

b) The number of scores you made in a soccer game

Not connected (Dot → discrete)

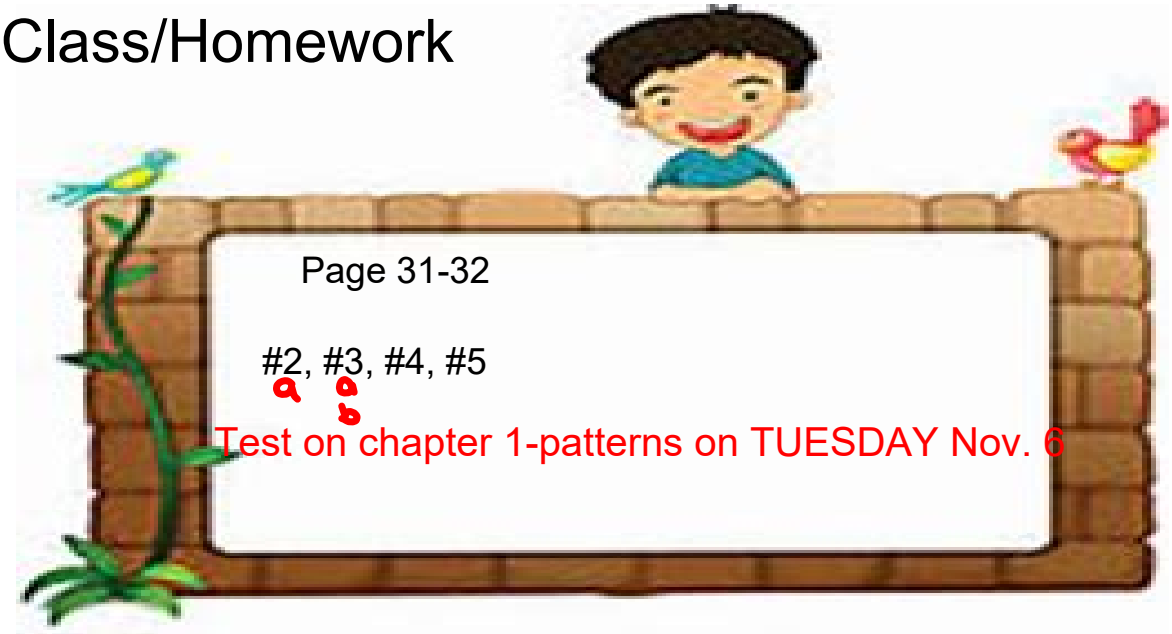
→ can't have part of a score

c) The time it takes for you to complete your homework.

→ Can have part of a time

So Connect dot (continuous)

Class/Homework



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#2, #3, #4, #5

Test on chapter 1-patterns on TUESDAY Nov. 6

Practice

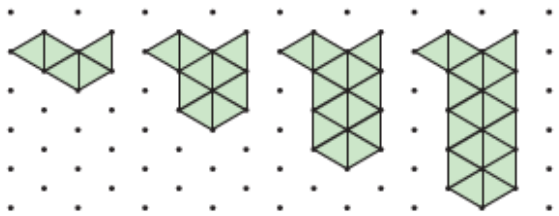
TIP

1. Record each pattern in a table. Then draw a graph to represent the pattern. Explain how the graph represents the pattern.

a)

b)

c)



Homework Solutions

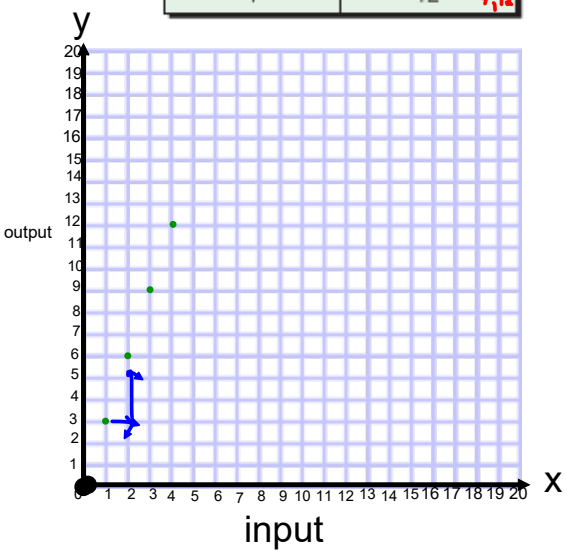
2. Use grid paper. Graph each table.
Describe the relationship shown on the graph.

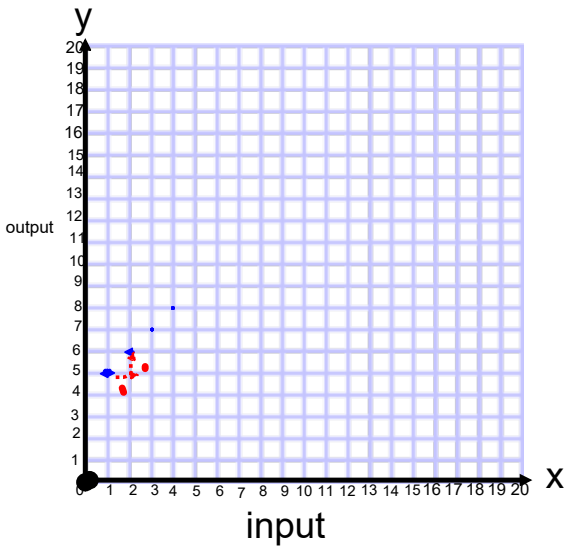
a)

Input	Output
1	3
2	6
3	9
4	12

b)

Input	Output
1	5
2	6
3	7
4	8





2. Use grid paper. Graph each table.
Describe the relationship shown on the graph.

a)

Input	Output
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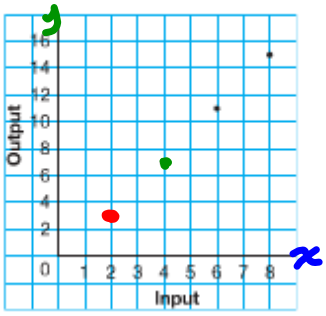
2	6
3	9
4	12

b)

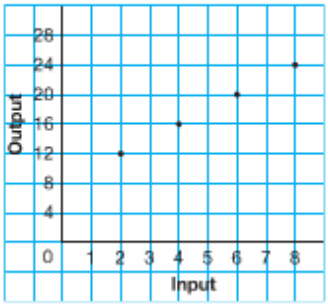
Input	Output
1	5
2	6
3	7
4	8

3. For each graph, make an Input/Output table.

a)



b)



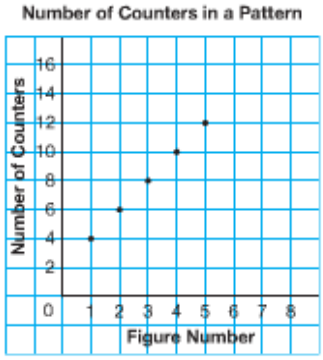
x Input	y Output	(x,y)
2	3	(2,3)
4	7	(4,7)

4. Use grid paper.
   a) Graph the data in the table.
   b) Describe the relationship shown on the graph.
   c) Write an expression to represent the pattern.
   d) Find the number of shapes in the 8th figure.
   What strategy did you use?
   Could you use the same strategy to find the number of shapes in the 18th figure?
   Explain.

Figure Number	Number of Shapes
1	1
2	6
3	11
4	16
5	21

+5

+5

increase by 1, the # of shapes

5. Use grid paper.
   a) Make a table.
   Record the figure number and the number of counters in a figure.
   b) How does the graph represent the pattern?
   c) Find the number of counters in the 7th figure.
   Describe the strategy you used.
   d) How many counters are in the 23rd figure?
   Describe the strategy you used to find out.