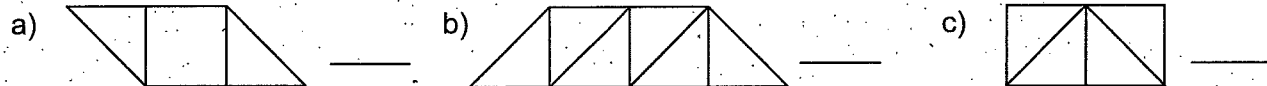
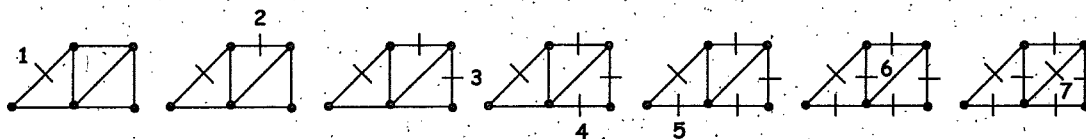


1. Count the number of line segments (lines that join pairs of dots) in each set of figures by marking each line segment as you count, as shown in the example:

HINT: Count around the outside of the figure first.

Example:



2. Continue the pattern below, then complete the chart:

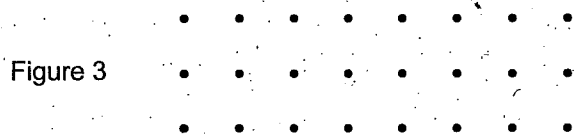
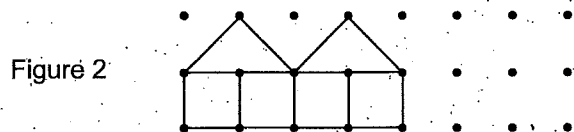


Figure	Number of Line Segments
1	
2	
3	

- a) How many line segments would Figure 4 have? _____
- b) How many line segments would you need to make a figure with 5 triangles? _____

3. Continue the pattern below, then complete the chart:

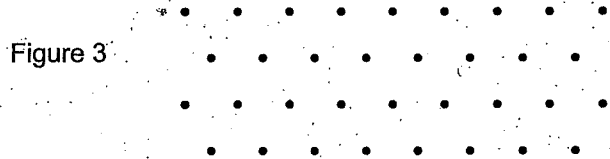
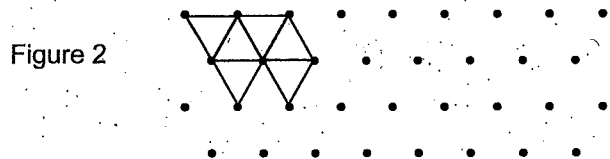
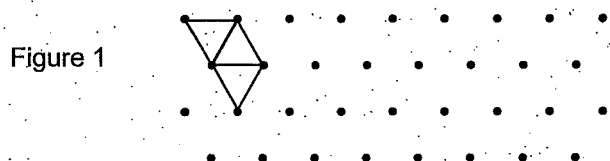


Figure	Number of Triangles	Number of Line Segments

- a) How many line segments would Figure 5 have? _____
- b) How many triangles would Figure 6 have? _____

4. The snow is 17 cm deep at 5 pm.
4 cm of snow falls each hour.
How deep is the snow at 9 pm?

Hour	Depth of Snow
5 pm	17 cm

5. Philip has \$42 in savings by the end of July.
Each month he saves \$9. How much will he have by the end of October?

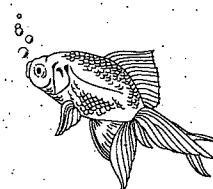
Month	Savings
July	\$42

6. Sarah's fish tank is leaking.
At 6 pm, there are 21 L of water in the tank.
At 7 pm, there are 18 L and at 8 pm, there are 15 L.

a) How many litres of water leak out each hour?

b) How many litres will be left in the tank at 10 pm?

c) How many hours will it take for all the water to leak out?

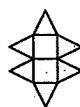


Hour	Amount of water in the tank
6 pm	21 L
7 pm	18 L
8 pm	15 L
9 pm	
10 pm	

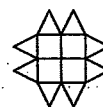


7. A store rents snowboards at \$7 for the first hour and \$5 for every hour after that.
How much does it cost to rent a snowboard for 6 hours?

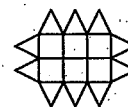
8. a) How many triangles would April need to make a figure with 10 squares?



1



2



3

b) April says that she needs 15 triangles to make the sixth figure. Is she correct?

9. Merle saves \$55 in August. She saves \$6 each month after that.
Alex saves \$42 in August. He saves \$7 each month after that.
Who has saved the most money by the end of January?