

Pattern Rules, Expressions and Substitution Worksheet

For each question:

- a) Determine the Pattern Rule.
- b) Turn the Pattern Rule into an Expression.
- c) Complete the T Chart.
- d) Substitute the Variable for a Number to answer the question (show your work)

1.

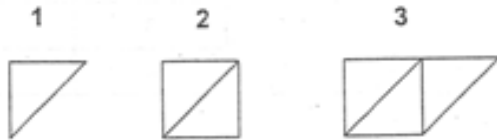


Figure Number	Number of Line Segments
1	
2	
3	

Pattern Rule: _____

Expression: _____

How many line segments would there be in Figure 9?

Workspace for Substitution

2.

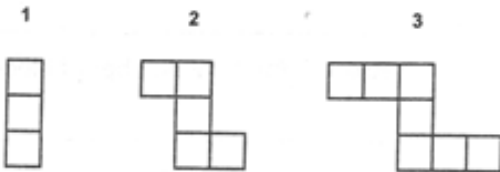


Figure Number	Number of Squares
1	
2	
3	

Pattern Rule: _____

Expression: _____

How many squares would there be in Figure 10?

Workspace for Substitution

3.

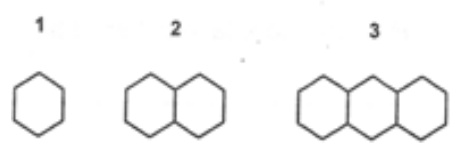


Figure Number	Perimeter
1	
2	
3	

Pattern Rule: _____

Expression: _____

What would be the perimeter in Figure 11?

Workspace for Substitution

4.

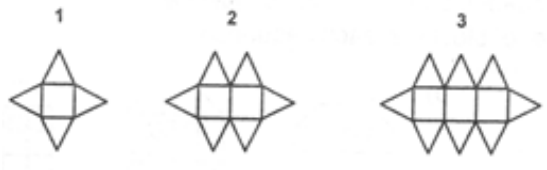


Figure Number	Number of Triangles
1	
2	
3	

Pattern Rule: _____

Expression: _____

How many triangles would there be in Figure 9?

Workspace for Substitution

5.

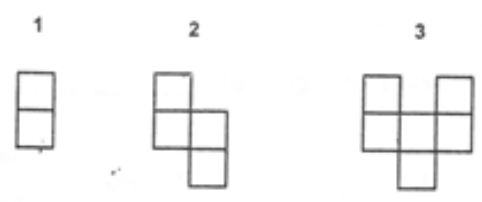


Figure Number	Perimeter
1	
2	
3	

Pattern Rule: _____

Expression: _____

What would be the perimeter in Figure 23?

Workspace for Substitution