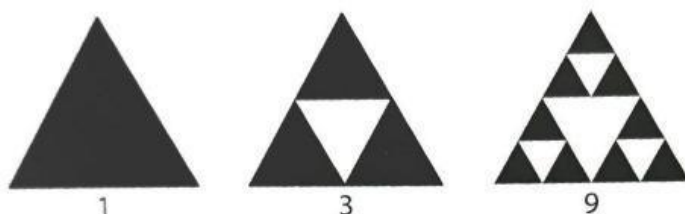




Date:	Grade: 9	Teacher: Sifana Siddiq
Name:	First Mid Term Revision Quiz	Marks:

A. You are given the sequence of numbers: 4, 9, 16, 25, 36, ... Use inductive reasoning to predict the next two numbers in the sequence. Explain your reasoning.

B. Find the next number and pattern description in the fractal triangle sequence diagram



C. Solving Linear Equations

1.Solve for x: $x + 7 = 12$

2.Solve for y: $y + 2 = 3y + 4$

D. 1. Determine if the equation $10x - 4 = 2(3x + 6)$ has one solution, no solution, or infinitely many solutions

E. Literal Equations

1. Solve for y : $2x + 3y = 6$

2. Solve for x : $ax + b = c$

F. Compound Inequalities

1. Solve the compound inequality and express the solution set using set-builder notation: $-4 \leq 2x + 3 < 9$

2. Find the intersection of the solution sets $x > -1$ and $x \leq 5$. Write the answer in set-builder notation

G. Absolute Value Equations and Inequalities

1. Solve for x : $|2x - 3| = 4$

2. Find the solution set: $|x - 7| < 5$

H. Graph the solution set of the inequality $-15 + 12y > 117$.