Equations and Problem Solving

Exploring Equations

#### 1. Matchstick Track

A matchstick track has 5 squares.

- *If the pattern continues, how many matches would be needed to build a track with 60 squares?*
- *Write an equation for finding the number of matches needed for any number of squares.*

2. Banquet Tables

Tables in the shape of a trapezoid are placed side by side in the following manner. The dots show how many people can sit at a table.

- *How many people can sit when there are 3 tables side by side? 10 tables? 50 tables?*
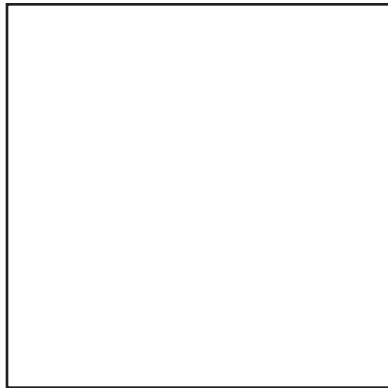- *Write an equations for finding the number of people that can sit at any number of tables.*
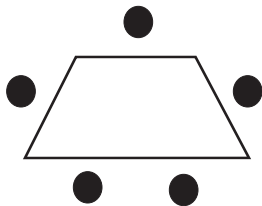
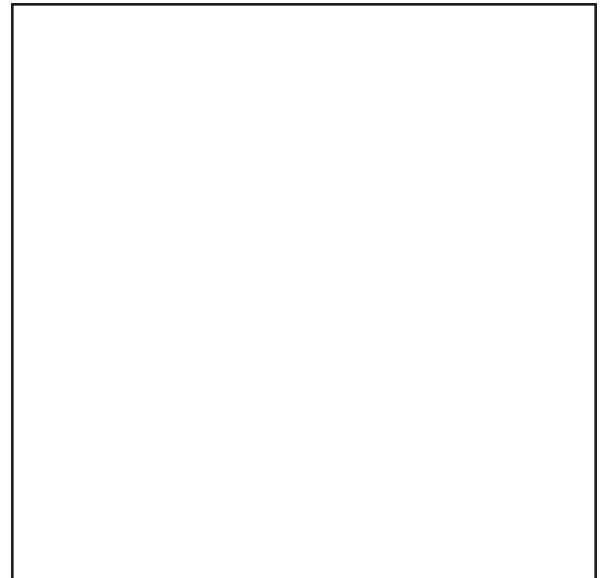#### 3. Growing Squares

Each of these are squares.

- *As the side of the square grows by one unit, what happens to the perimeter?*
- *Write an equation for finding the perimeter of any size of square.*

1"

2"

3"

Side of Square	Perimeter
1	4
2	
3	