

Additional Practice

Investigation 1

Thinking With Mathematical Models

Math Monday
 Oct. 28

1. Toothpicks were used to make the pattern below.



- How many toothpicks will be in the 5th figure? In the 6th figure?
- Write an equation for the number of toothpicks t needed to make the n th figure.
- Identify and describe the figure in this pattern that can be made with exactly 100 toothpicks.
- Describe the pattern in words.
- Make a graph of the data.

On graph paper

- Is the pattern linear or not linear? Explain.

2. Toothpicks were used to make the pattern below.



- How many toothpicks will be in the 5th figure? In the 6th figure?
- Write an equation for the number of toothpicks t needed to make the n th figure.

Additional Practice *(continued)*

Investigation 1

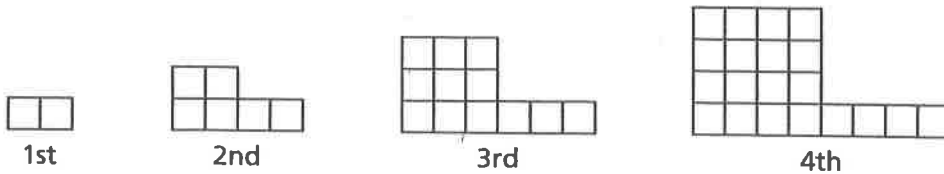
Thinking With Mathematical Models

e. Make a graph of the data.

On graph paper

f. Is the pattern linear or not linear? Explain.

4. Square tiles were used to make the pattern below.



a. How many tiles will be in the 5th figure? In the 6th figure?

b. Write an equation for the number of tiles t needed to make the n th figure.

c. Identify and describe the figure in this pattern that can be made with exactly 420 tiles.

d. Describe the pattern in words.

e. Make a graph of the data.

On graph paper

f. Is the pattern linear or not linear? Explain.