

Skill: Patterns and Predictions

Investigation 1

Thinking With Mathematical Models

Complete each table.

1.

Time (h)	1	2	3	4	7
Distance cycled (mi)	8	16	24	32	

2.

Time (min)	1	2	3	4	7
Distance from surface of water (yd)	-3	-2	-1	0	

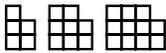
For Exercises 3–4, find the values of the missing entries in each table.

3.

m	4	6		10
n	24	26	28	

4.

p		6	10	14
q	1	13	25	

5. A pattern of squares is shown. 

a. Sketch the 4th and 5th figure in this pattern.

b. Make a table comparing the figure number to the number of squares. Write an expression for the number of squares in the n th figure.

Skill: Patterns and Predictions *(continued)*

Investigation 1

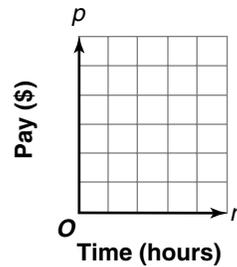
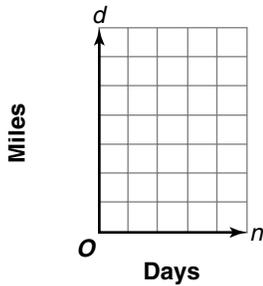
Thinking With Mathematical Models

Make a table for each function. Then graph the function. Show only the portion that makes sense for each situation.

6. On a trip Alex averages 300 mi/day. The distance d he covers is a function of the number of days n .
7. Suppose you earn \$7 per hour. The number of hours you work n determines your pay p .

n				
d				

n				
p				



8. Suppose you have \$50. The amount of money you spend s decreases the amount you have left a .
9. You have \$10.00. Each week you save \$2.50. The number of weeks you save w increases your savings s .

s				
a				

w				
s				

