Indicators

Objective:

5.04 Use graphs, tables, and symbols to model and solve problems involving rates of change and ratios.

Vocabulary and Resources	
equivalent ratios	proportions

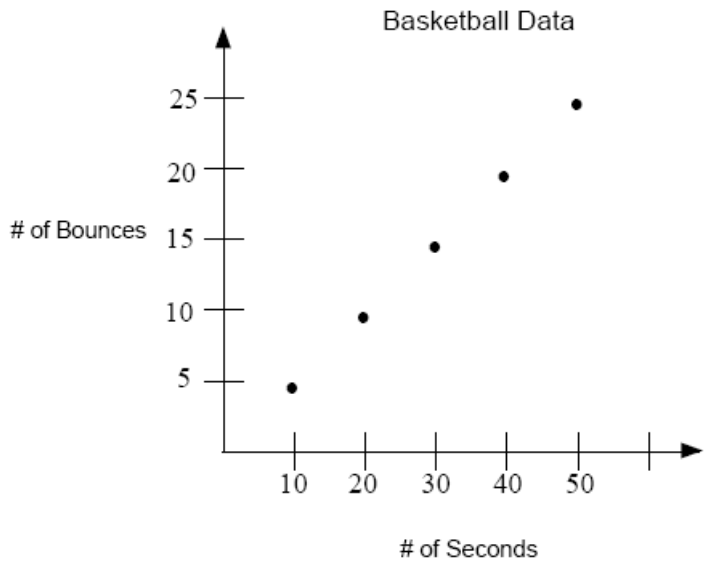
A. There are 25 students in Ms. Simple's class. If the ratio of boys to girls is 2:3, how many boys and girls are there in Ms. Simple's class?

B. Use the information in the table below to predict how many wins Allison would have after she plays 32 matches of tennis assuming the rate of wins stays the same.

Allison's Tennis Record

Matches Won	Matches Lost	Matches Tied
4	1	3
8	2	6
12	3	9
?	4	12

C. The graph below shows how many bounces of a basketball can occur based on the number of seconds it is bounced. Based on the data in the graph below, what is the rate of change?



D. Study the pattern below. Draw the next three figures in this pattern. Then fill out the chart below. Describe the fifteenth figure in this series. Write an expression that models this pattern. If the squares are made of toothpicks, how many toothpicks would be needed for the 50th figure?

Figure 1 Figure 2 Figure 3 Figure 4 Figure 5 Figure 6

Figure Number	Number of Toothpicks
1	4
2	
3	
4	
5	
6	