Each of the following three families of rectangles has its growth pattern.

**Family A**

Third Year

Second Year

First Year

8

8

8

3

1

2

**Family B**

Third

Year

Second

Year

2

3

1

First

Year

3

1

2

**Family C**

1/4

Second Year

First Year

1/4

4

2

Third Year

1/4

8

In Family A the width grows each year by one unit: the length remains the same at 8 units. In Family B, the width and length of the rectangle each grow by one unit each year. In Family C the length doubles each year, and the width remains equal to ¼.

Try to find various hypotheses comparing change in area, perimeter, etc. For example, answer the following questions: In which family will the area be largest and when? When will the area of each family exceed 1000 u2? Check your hypotheses with the tools available and explain.