Blue Squares and Beyond

NAME _____

Use the applet to complete the charts. Follow the directions given by your teacher.

Chart 1

RECTANGLE A	RECTANGLE B	RATIOS
Width:	Width:	$\frac{\text{Width A}}{\text{Width B}} =$
Height:	Height:	$\frac{\text{Width A}}{\text{Width B}} =$
Area:	Area:	$\frac{\text{Width A}}{\text{Width B}} =$

Chart 2

RECTANGLE A	RECTANGLE B	RATIOS
Width:	Width:	$\frac{\text{Width A}}{\text{Width B}} =$
Height:	Height:	$\frac{\text{Width A}}{\text{Width B}} =$
Area:	Area:	$\frac{\text{Width A}}{\text{Width B}} =$

1. What can you say about these two figures just by looking? _____

2. What do you notice about the two sets of ratios? _____

3. Is there a common factor for the numerator and denominator? _____

4. Divide both the numerator and denominator by the common factor. What do you get?

_____

Chart 3

RECTANGLE A	RECTANGLE B	RATIOS
Width:	Width:	$\frac{\text{Width A}}{\text{Width B}} =$
Height:	Height:	$\frac{\text{Width A}}{\text{Width B}} =$
Area:	Area:	$\frac{\text{Width A}}{\text{Width B}} =$

5. How can you prove that these figures are not similar? _____

Chart 4

RECTANGLE A	RECTANGLE B	RATIOS
Width:	Width:	$\frac{\text{Width A}}{\text{Width B}} =$
Height:	Height:	$\frac{\text{Width A}}{\text{Width B}} =$
Area:	Area:	$\frac{\text{Width A}}{\text{Width B}} =$

6. How do you know just by looking at A and B that they are not similar? _____

7. What would you change on Rectangle B to make them similar? _____

Chart 5

EXAMPLE	RECTANGLE A	RECTANGLE B	SCALE FACTOR
1	2 × 3	16 × 24	4
2	2 × 3		
3			
4			

Chart 6

WIDTH		
HEIGHT		
SQUARES		

8. What does the number of blue squares represent? _____

9. How can you determine the area without counting the number of squares covered?

_____

10. How do you label area? Why? _____

Chart 7

	RECTANGLE A	RECTANGLE B	SET 1	SET 2	SET 3	SET 4
Width						
Height						
$\frac{\text{Width}}{\text{Height}}$						

11. What is the scale factor of each set? _____

12. What is the scale factor for the area of each set? _____

13. What is the relationship between the scale factor for each set and the area for that set?

_____

14. Why do you square the scale factor of each set to find the scale factor of the area?

_____