Lesson # 1 ANSWER SHEET

Similar Shapes: Rations and Proportions

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1. 4

2. Keep adding green segments together until they equal the length of a red rod.

3. One red segment + one blue segment + one green segment

4. The first pair.

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1. 6 units

2. 2 square units

3. Yes. Angles are congruent and corresponding sides are proportional.

4. 12 units

5. 8 square units

6. 2:1 or 2

7. 3 units by 6 units

8. 18 units

9. 18 square units

10. 4 units by 8 units

11. 24 units

12. 32 square units

13. 10 units

14. 6 square units

15. 4 units by 6 units

16. 20 units

17. 24 square units

18. 6 units by 9 units

19. 30 units

20. 54 square units

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21. 8 units by 12 units

22. 40 units

23. 96 square units

Table:

	1×2 **Rectangle**		2×3 **Rectangle**	
Dilation Factor	**Perimeter Ratios**	**Area Ratios**	**Perimeter Ratios**	**Area Ratios**
$\frac{2}{1}$	$\frac{P_2}{P_1} = 2{:}1$	$\frac{A_2}{A_1} = 4{:}1$	$\frac{P_2}{P_1} = 2{:}1$	$\frac{A_2}{A_1} = 4{:}1$
$\frac{3}{1}$	$\frac{P_3}{P_1} = 3{:}1$	$\frac{A_3}{A_1} = 9{:}1$	$\frac{P_3}{P_1} = 3{:}1$	$\frac{A_3}{A_1} = 9{:}1$
$\frac{4}{1}$	$\frac{P_4}{P_1} = 4{:}1$	$\frac{A_4}{A_1} = 16{:}1$	$\frac{P_4}{P_1} = 4{:}1$	$\frac{A_4}{A_1} = 16{:}1$

24. They are the same.

25. The area of the shape is the square of the dilation factor.