

Practice w/ Scale Factor

Unit 5

Name _____

Period _____

- 1) Given the ordered pair (5, 15), what would be the new ordered pair with a scale factor of 80%?
- 2) Given the ordered pair (36, 40), what would be the new ordered pair with a scale factor of $\frac{1}{4}$?
- 3) Given the ordered pair (14, 18), what would be the new ordered pair with a scale factor of 1.5?
- 4) Given the following ordered pairs B (4, 12) and B' (2, 6); what is the scale factor used in this dilation?
- 5) Given the following ordered pairs C (16, 20) and C' (12, 15); what is the scale factor used in this dilation?
- 6) Given the following ordered pairs D (25, 40) and D' (5, 8); what is the scale factor used in this dilation?
- 7) Stacey decides to dilate the area of her rectangular garden. The length of her original garden is 10 feet and the area is 45 square feet. The length of the new garden will be 15 feet. What is the area of the new garden?

Matching:

Match the term with the correct definition.

- A) corresponding sides
- B) congruent
- C) cross product
- D) proportion
- E) ratio
- AB) scale factor
- AC) similar

____ 8. a comparison of two quantities by division

____ 9. the ratio used to enlarge or reduce similar figure

____ 10. the result of multiplying the numerator of one ratio in a proportion by the denominator of the other ratio

____ 11. matching sides of two or more polygons

____ 12. an equation that states that two ratios are equivalent

____ 13. having the same shape and size

____ 14. when figures have the same shape but not necessarily the same size

Complete the following Table:

Scale Factor Fraction	Scale Factor Decimal	Scale Factor Percentage	Reduction or Enlargement
	0.5		
		75%	
9/10			
		400%	
	0.4		
1/8			
	.24		

Complete the Table: The table below lists some ratios of 2 similar figures. Fill in the missing ratios.

Ratio of the SIDES	Ratio of the PERIMETEER	Ratio of the AREAS
	$\frac{1}{3}$	
		$\frac{1}{16}$
$\frac{2}{3}$		
		$\frac{9}{64}$
	$\frac{2}{5}$	
$\frac{3}{4}$		