## Name: \_\_\_\_\_

## Level 1 – One of each type (Easy)

1) Graph the original figure, then perform a dilation using the given scale factor.

A(1, 1) B(2, 4) C(3, 1), k = 2

missing value.

х

80



2) Are they similar? Show your work either way. If they are similar, write a similarity statement.

3) Are they similar? Show your work either way. If they are similar, write a similarity statement.



5) Which sequence of transformations will take figure A 4) The figures are similar. Find the onto figure B?



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## Level 2 – One of each type (Medium)

6) Graph the original figure, then perform a dilation using the given scale factor.

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T(-8, -4) R(-8, 8) A(4, 6) P(4, -2),  $k = \frac{1}{4}$ 



7) Are they similar? Show your work either way. If they are similar, write a similarity statement.



8) Are they similar? Show your work either way. If they are similar, write a similarity statement.



dilation 30

9)  $\Delta ABC \sim \Delta DEF$ . Find x, y, and z. F



10) Which sequence of transformations will take figure A onto figure B? (There are two that work!)

A. Translation 5 units right, then dilation using a scale factor of 2
B. Translation 5 units right, then dilation using a scale factor of 3
C. Reflection across the x-axis, then dilation using a scale factor of 2
D. Translation 6 units right and 1 unit up, then dilation using a scale factor of 1.5

E. Dilation using a scale factor of 2, then translation 10 units right

Level 3 – One of each type (Hard)

followed by



11) Graph the original figure, then perform a dilation using the given scale factor.

B(3, 9) T(7, 8) W(9, 2), k =  $\frac{2}{3}$ 

## 12) Are they similar? Show your work either way. If they are similar, write a similarity statement.

13) Are they similar? <u>Explain</u> your reasoning. If they are similar, write a similarity statement.



14)  $\Delta TUR \sim \Delta KEY$ . Find a, b, and c.



15) Which sequence of transformations will map figure A onto figure B?  $10^{10}$ 

