Math II

HW #14

Name: Date: Per.:

1. A preimage segment length is 5 inches and it is dilated by a scale factor of 6. What is the length of the image segment?

2. A preimage segment length is 9 inches and it is dilated by a scale factor of 10. What is the length of the image segment?

3. A preimage segment length is 12 inches and it is dilated by a scale factor of .5. What is the length of the image segment?

4. A preimage segment length is 8 feet and its image length is 16. What is the scale factor of the dilation?

5. A preimage segment length is 9 feet and its image length is 45. What is the scale factor of the dilation?

- 6. A preimage segment length is 20 feet and its image length is 5. What is the scale factor of the dilation?
- 7. $\Delta A'B'C'$ is the image of ΔABC . What is the length of A'C'?



8. A triangle has side lengths of 10, 12, and 15 mm. The triangle is dilated by a scale factor of 3. What are the lengths of the image sides?