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. $\Delta A^{\prime} B^{\prime} C^{\prime}$ is the image of $\triangle A B C$. What is the length of $A^{\prime} C^{\prime}$ ?

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?
