Solve. Show your work.

5. A circle with radius of 7 feet undergoes a dilation with scale factor 2.8. Find the radius of the image circle.

6. A rectangle has coordinates O (0, 0) A (10, 0), B (10, −8), and C (0, −8). It undergoes a dilation with scale factor 0.75.

a) Find the length and width of $OABC$ and the image rectangle.

b) What are the coordinates of the image rectangle under the dilation if the center of dilation is at the origin?