Quiz: Intuitive Notion of Dilation

1. Is this an example of a dilation?

2. Is this an example of a dilation?

3. Under a dilation, the picture shown at the left has been reduced in size. What is the scalar factor?

   \[ \frac{3.6 \text{ cm}}{9 \text{ mm}} \]

4. The length of the small axe is 3.6 inches. Under a dilation of scale factor 2.2, what is the length of the large axe?

   \[ x \]

5. Under the dilation shown at the left, what is the value of \( x \) to the nearest hundredth?

   \[ x = 17 \]

6. A large pad is 74 mm wide. After a dilation, the pad is 48 mm wide. What is the scalar factor for this dilation?

7. Under the dilation shown at the left, what will be the value of the "?"?

   \[ 7 \text{ units} \]  
   \[ \text{scale factor} = 1.8 \]

8. The radius of the large mushroom is 64 mm. Under a dilation of scale factor 0.2, what is the length of the small mushroom?

   \[ \frac{78 \text{ cm}}{280 \text{ cm}} \]

9. Under the dilation shown at the left, what will be the value of the "?"

   \[ 5 \text{ units} \]  
   \[ \text{scale factor} = 3.7 \]

10. Under a dilation, the picture shown at the left has been reduced in size. What is the scalar factor?

© MathWorksheetCenter.com