



Practice – Part 1

Instructions: Answer each of the following practice questions on a separate piece of paper. Step by step solutions are provided under the Solutions tab. You will learn the material more thoroughly if you complete the questions before checking the answers under the Solutions tab in Moodle.

1. A factory makes several different sizes of canned tomato products.

$$d = 5.4 \text{ cm}$$

$$h = 9.1 \text{ cm}$$



The large can of tomato sauce has a diameter of 5.4 cm and a height of 9.1 cm. A scale factor of 0.25 is applied to the large can to create the small can of tomato paste. What are the dimensions of the small can after the dilation? Round the answer to 1 decimal place.

2. Joe attaches miniature flags to toothpicks.



The current dimensions of his flags are 4.5 cm by 2 cm. Joe would like to make a larger version of his flags on toothpicks. If Joe dilates the flags by 1.75, what will the new dimensions of the flags be? Round your answer to 1 decimal place.