

Percent Error

Direction: Find the Percent Error

$$\text{Use formula: \% Error} = \frac{\text{Accepted Value} - \text{Experimental Value}}{\text{Accepted Value}} \times 100$$

1. The accepted volume of a liquid is 75 ml. After conducting an experiment, the measured volume is 80 ml. Calculate the percent error.

2. The experimental temperature of a substance is 25°C. However the actual temperature recorded was found to be 28°C. Determine the percent error.

3. Suppose a dining table of length 150 cm was ordered to be made. When measured, the length was found to be 142 cm. Find the percent error in the measurement.

4. The actual weight of a lunch box is 120 grams. Sarah wrongly measured the weight as 135 grams. Calculate the percent error.

5. The accepted density of water is 1 g/cm³. During a lab experiment, a student obtained the value as 1.05 g/cm³. Calculate the percent error in the measurement.

Percent Error

Answers

1. The accepted volume of a liquid is 75 ml. After conducting an experiment, the measured volume is 80 ml. Calculate the percent error.

6.67%

2. The experimental temperature of a substance is 25°C. However the actual temperature recorded was found to be 28°C. Determine the percent error.

10.71%

3. Suppose a dining table of length 150 cm was ordered to be made. When measured, the length was found to be 142 cm. Find the percent error in the measurement.

5.33%

4. The actual weight of a lunch box is 120 grams. Sarah wrongly measured the weight as 135 grams. Calculate the percent error.

12.5%

5. The accepted density of water is 1 g/cm³. During a lab experiment, a student obtained the value as 1.05 g/cm³. Calculate the percent error in the measurement.

5%