

Percent Error Practice

Directions: *For each of the following situations find the percent error involved.*
Be careful in determining the true vs. observed value.

1. Samantha S. Sloppiness measured the volume of her soda before she drank it for her midmorning snack. She measured the volume of the 12 oz. bottle to be 14 oz.
2. Clyde Clumsy was directed to weigh a 500 g mass on the balance. After diligently goofing off for ten minutes, he quickly weighed the object and reported 458 g.
3. Pretty Patty Pestilence had casually recorded her grades for the nine weeks in her notebook. She concluded she had 250 points out of 300 for the grading period. However, Miraculous (chem teacher) determined she had 225 points out of 300 and awarded her a "C" for the grading period.
4. Drew D. Dingaling came to Miraculous with a problem. Drew was told to measure 50 cm of copper wire to use in an experiment. Since his ruler only measured to 45 cm he used this amount of wire and his experiment was a failure.
5. Henry Heavyfoot was just arrested for speeding by Officer O'Rourke for traveling 65 mph in a 55 mph zone. Henry claimed his speedometer said 55 mph not 65 mph.
6. Willomina Witty was assigned to determine the density of a sample of nickel metal. When she finished, she reported the density of nickel as 5.59 g/ml. However, Miraculous knew the density of nickel was 6.44 g/ml.
7. An experiment to determine the volume of a "mole" of a gas was assigned to Barry Bungleditup. He didn't read the experiment carefully and concluded the volume was 18.7 liters. Miraculous knew he should have obtained 22.4 liters.

Answers: 1. 16.6%; 2. 8.40%; 3. 11.1%; 4. 10.0%; 5. 15.4%; 6. 13.2%; 7. 16.5%

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