1) Student A finds the density of a piece of quartz to be 2.50 grams per cubic centimeter. Student B finds the density to be 2.80 grams per cubic centimeter. The actual density of quartz is 2.65 grams per cubic centimeter. Which is a true statement about student A's percent of error (percent deviation)?
A) It cannot be determined.
B) It is less than student B's percent of error.
C) It is greater than student B's percent of error.
D) It is the same as student B's percent of error.

2) The dewpoint temperature of the air is determined to be 10°C. If the accepted value for the dewpoint temperature on that day is 12°C, what is the percent deviation from the accepted dewpoint value?
A) 83.3%  C) 2.0%
B) 13.9%  D) 16.7%

3) Students calculated the circumference of a globe to be 60. centimeters. The actual circumference of the globe is 63 centimeters. The percent deviation of the students' calculation was
A) 5.0%  C) 21%
B) 0.48%  D) 4.8%

4) A student determines the density of a rock to be 2.2 grams per cubic centimeter. If the accepted density of the rock is 2.5 grams per cubic centimeter, what is the percent deviation (percentage of error) from the accepted value?
A) 30.0%  C) 12.0%
B) 8.8%  D) 13.6%

5) A student determines the mass of a rock to be 196 grams, but the actual mass of the rock is 200. grams. The student's approximate percent deviation (percentage of error) is
A) 1.0%  C) 4.0%
B) 1.5%  D) 2.0%

6) A student measures the length of a room to be 6.9 meters. The actual length of the room is 7.5 meters. Determine the student's percent deviation (percent of error).
A) 20%  C) 8%
B) 14%  D) 6%
7) A student calculates the period of Saturn's revolution to be 31.33 years. What is the student's approximate deviation from the accepted value?
   A) 6.3%  C) 19%
   B) 5.9%  D) 1.9%

8) A student incorrectly measured the volume of a mineral sample as 63 cubic centimeters. The actual volume was 72 cubic centimeters. What was the student's approximate percent deviation (percentage of error)?
   A) 12.5%  C) 14.2%
   B) 9.0%  D) 15.3%

9) A student determined the porosity of a sample of soil to be 37.6%. The actual porosity is 42.3%. The student's percent deviation from the accepted value (percentage of error) is approximately
   A) 79.9%  C) 11.1%
   B) 4.7%  D) 12.5%

10) A student measured the mass of a rock sample and recorded it as 51 grams. Later it is found that the accepted value of the rock's mass is 60 grams. What was the percent deviation (percent error) of the original mass?
    A) 15%  C) 18%
    B) 7%  D) 9%

11) A student determines that the density of an aluminum sample is 2.9 grams per cubic centimeter. If the accepted value for the density of aluminum is 2.7 grams per cubic centimeter, what is the student's approximate percent deviation?
    A) 7.4%  C) 20%
    B) 0.20%  D) 0.70%

12) A person measures the length of a piece of wood to be 41 centimeters. If the actual length is 40. centimeters, what is the percent deviation (percent of error) from the actual length?
    A) 1.0%  C) 9.8%
    B) 5.0%  D) 2.5%

13) A student determines that the porosity of a large volume of sand is 40%. The accepted value is 46%. What is the student's approximate percent deviation (percent of error) from the accepted value?
    A) 46%  C) 13%
    B) 10%  D) 7%

14) A student finds the mass of an igneous rock sample to be 48.0 grams. Its actual mass is 52.0 grams. What is the student's approximate percent deviation (percent of error)?
    A) 7.7%  C) 4.0%
    B) 8.3%  D) 9.2%
15) A person incorrectly measured the length of a room as 13.0 meters when the actual length was 12.0 meters. What is the person's approximate percent deviation (percentage of error)?  
A) 5.9%  
B) 8.3%  
C) 7.7%  
D) 1.0%  

16) A student's measurement of the mass of a rock is 30 grams. If the accepted value for the mass of the rock is 33 grams, what is the percent deviation (percent of error) of the student's measurement?  
A) 9%  
B) 91%  
C) 11%  
D) 30%  

17) A student calculates the specific heat of ice to be 0.40 cal/g °C. What is the student's percent deviation from the accepted value?  
A) 25.%  
B) 20.%  
C) 2.0%  
D) 2.5%  

18) A rock's density is calculated as 2.7 g/cm³ but its accepted density is 3.0 g/cm³. Which equation, when solved, will provide the correct percent deviation from the accepted value?  
A) Deviation(%) = \frac{3.0 - 2.7}{2.7} \times 100  
B) Deviation(%) = \frac{3.0 - 2.7}{3.0} \times 100  
C) Deviation(%) = \frac{3.0}{2.7} \times 100  
D) Deviation(%) = \frac{2.7}{3.0} \times 100