2.E: Measurement and Problem Solving (Exercises)

1. Define *significant figures*. Why are they important?
2. Define the different types of zeros found in a number and explain whether or not they are significant.
3. How many significant figures are in each number?
    a. 140
    b. 0.009830
    c. 15,050
    d. 221,560,000
    e. 5.67×10^{3}
    f. 2.9600×10^{-5}
4. How many significant figures are in each number?
    a. 1.05
    b. 9,500
    c. 0.0004505
    d. 0.00045050
    e. 7.210×10^{6}
    f. 5.00×10^{-6}
5. Round each number to three significant figures.
    a. 34,705
    b. 34,750
    c. 34,570