REVIEWQUESTIONS
Chapter 1

1. Identify each of the statements below as observation, hypothesis, experiment or conclusion:

   a) Sally thinks she may be allergic to shrimp.   **hypothesis**

   b) Yesterday, an hour after Sally ate a
      shrimp salad, she broke out in hives.   **observation**

   c) Today, Sally had some soup that
      contained shrimp, but she did not break
      out in hives.   **observation**

   d) Sally realizes that she does not have an
      allergy to shrimp.   **conclusion**

2. Express each of the following numbers in scientific notation, with 3 significant figures:

   a) 2900000   **2.90×10^6**   b) 0.005865   **5.87×10^{-3}**

   c) 0.000004563   **4.56×10^{-6}**   d) 410870   **4.11×10^5**

3. Solve each equation below for x:

   d) $3x - (-6) = 12$ **$3x + 6 = 12$**
   $3x = 6$
   $x = 2$

   e) $\dfrac{4x}{-12} = -8$ **$4x = 96$**
   $x = 24$

   f) $3x - 4 = 24 - x$ **$4x = 28$**
   $x = 7$

4. There are 36 carpenters in a crew. On a certain day, 29 were present. What percent showed up for work? (round to the nearest tenth)

$$\%\,worked = \frac{29}{36}\,x100 = 80.6\%$$

5. A student answered 86 problems on a test correctly and received a grade 98%. How many problems were on the test, if all the problems were worth the same number of points? (Round to the nearest whole number)

$$86\ correct\ x\ \frac{100\ problems}{98\ correct} = 91\ problems$$