1. When you have finished 1-8 on page 12 you are ready to calculate the acceleration of the freely-falling object in SI units, as requested in #9:
   a. The definition of "acceleration" on RSI says we must divide the object's change in _____ by the corresponding change in _____.
   b. To determine the *units* of that quotient you must _____ the SI speed unit mentioned in #8b by the SI ____ unit mentioned in #6b, using the usual rules of algebra. In other words, you must divide "_____s per ____" by "_____s" exactly as we did in #9 on page 9.
   c. Remember that "per" means "over" or "divided by", so one of the units has the form of a *fraction*. The rule for dividing fractions is reviewed in #9 on page 9. It says we must "invert the _____ and then _____."
   d. Simplifying the result, we find that the SI unit of acceleration must be " _____ per _____".
   e. To find the GLV of the acceleration *(in standard units)* you must divide the __LV of the change in _____ by the __LV of the falling _____ interval.
   f. Those two numbers can be copied from #___ and #___ on page 12:
   GLV of _____ = (_____ _____) ÷ (____ ____) = _____ _____
   g. To find the SLV of the acceleration you divide the __LV of the _____ by the __LV of the _____ _____ _____. (See #7 on page 4.) Those numbers are *also* recorded in #___ and ___ on page 12:
   SLV of _____ = (_____ _____) ÷ (____ ____) = _____ _____

2. The last step is to change from centimeters to meters by moving the decimal point ___ jumps to the _____. (For example, 150 cm. = ___ meter.) Now we can write a conclusion in SI units:
   a. "The acceleration of a freely falling object is between ____ and ____ ___ per____." Using #16 on RS I, we get "acceleration = _____ ± ____ _____."
   b. "The acceleration of a freely falling object is _____ _____ ± ___%"
   c. We measured the distances between dots with an uncertainty of ± ____ cm. The uncertainty of the falling time interval in 3b was ± ____ ticks. The uncertainty of the frequency in #6 was ± ____%. Most of the uncertainty in our final result must be blamed on our lack of precision in measuring the _____.

3. Page 66 of the PSSC textbook (page 76 in the L-2 book) says that the acceleration of a freely falling object near the earth's surface is approximately ___ _____. - Does #2 (above) agree with that statement? ___ The negative sign given in the book is there to remind us that this acceleration is in the _____ward direction.

4. That acceleration is being recorded for future reference in # ___ on the Chapter __ review sheet, which is called "RS I".