

Scientists use significant figures (sig figs) to help calculate answers to their proper precision.

To review, remember the following guidelines:

1. Any non-zero number to the left of the decimal is significant. (4,548 = 4 sig figs)
2. Any zero to the left of the decimal is non-significant unless there is a non zero number to the right of it. (100 = 1 sig fig, 1001 = 4 sig figs)
3. Any zero to the right of the decimal is not significant unless there is a non zero number to the left of it. (.000001 = 1 sig fig, .0010005 = 5 sig figs)

In section 1, write the number of significant figures there are in each number.

In section 2, perform the math involved in each problem, and report the final answer using the proper number of sig figs (don't forget to box your answer!).

SECTION 1

Write the number of sig figs in each number

345 _____ 3,400 _____ 9 _____ 2,567.2 _____

.001 _____ 100 _____ .00123 _____ 4.00001 _____

54 _____ 1,23.0 _____ .000303 _____ 945,449 _____

SECTION 2

Perform the indicated math and write the correct answer with the proper number of sig figs. Box your answer!

$$(24.5)(19.45) =$$

$$(4,567) / (4) =$$

$$45.666 + 3.001 =$$

$$(456)(3.334)(2.1) =$$

$$(56.33)(.00009)(12,345) =$$

$$(3.145632) / (.994) =$$

$$(9,565,555) / (.003456000)$$