

Multiplication and Division-

How many significant digits should the results of these calculations have?

- a. $(4500)(0.002)(6.9 \times 10^3)$ _____
- b. $(3.00 \times 10^{-8})(0.003010)$ _____
- c. $\frac{(9.002 \times 10^7)(7200)}{(0.080)(6.1159 \times 10^2)}$ _____

Addition and Subtraction-

Circle the last column to which these calculated answers will be rounded:

| | | |
|----------|----------|-----------|
| 1005.2 | 64.800 | 0.0055 |
| + 26.35 | + 8940 | - 0.01127 |
| + 0.0028 | - 78.066 | - 0.70 |
| _____ | _____ | _____ |

Rounding:

Round to three (3) significant digits:

- a. 3.14159 _____
- d. 124,500 _____
- b. 0.002927 _____
- e. 12.98 _____
- c. 23998 _____
- f. 55.650001 _____

Calculations and Rounding:

Perform these calculations and round to the correct number of significant digits.

- a. $791.6 \times 52 =$ _____
- b. $98.4 - 0.0075 =$ _____
- c. $852 \times 27.0 =$ _____
- d. $7500 + 123.4 - 0.06 =$ _____
- e. $(1.50)(1700)(2.0 \times 10^{-4}) / 3.4378 =$ _____

Review:

When measurements are accurate, they _____.

When measurements are precise, they _____.

Give the number of significant digits in these measurements:

- a. 93,000,000 mi _____
- e. 235,000 m _____
- b. 404.3 kg _____
- f. 0.7070 s _____
- c. 0.00303 cm _____
- g. 4500.0 m³ _____
- d. 0.0027 g _____
- h. 4.00×10^{-2} mm _____