

Significant Figure Practice 1

Determine the number of significant figures in the following:

- | | | |
|-----------------------|------------------------|-------------------------|
| 1) 1.000 | 6) 5.432 | 11) 400 <u>0</u> 00 |
| 2) 300 | 7) 0.189 | 12) 3500.006 |
| 3) 0.00504 | 8) 0.006070 | 13) 8365.5 |
| 4) 1.24×10^6 | 9) 7.500×10^8 | 14) 0.015 |
| 5) 604000. | 10) 99.9 | 15) 1.100×10^4 |

Perform the following calculations (DO NOT FORGET UNITS!):

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|--|--|
| 1) $12 \text{ cm} + 0.031 \text{ cm} + 7.696 \text{ cm}$ | 13) $1.8 \times 10^{-5} \text{ cm} + 3.25 \times 10^{-4} \text{ cm}$ |
| 2) $8.071 \text{ cm}^2 / 4.216 \text{ cm}$ | 14) $5.000 \text{ miles} \times 7.3216 \text{ miles}$ |
| 3) $2.89 \text{ cm} \times 4.01 \text{ cm}$ | 15) $5.90 \times 10^8 / (1.006 + 2.35)$ |
| 4) $2.3 \times 10^2 \text{ g} + 4.62 \times 10^2 \text{ g} + 3.82 \times 10^2 \text{ g}$ | 16) $4.32 \times 10^7 \times 1.89 \times 10^{-3}$ |
| 5) $(3.08 \text{ Km} + 2.95 \text{ Km}) / 3.0 \text{ Km}$ | 17) $1.100 \text{ mg} + 1.105 \text{ mg}$ |
| 6) $5.0 \text{ cm} \times 24.56 \text{ cm}$ | 18) $38.905 \text{ g} - 13.11 \text{ g}$ |
| 7) $2.865 \times 10^4 \text{ ml} \times 1.47 \times 10^3 \text{ ml}$ | 19) $7.890 - 14.05 + 13.885$ |
| 8) $1.142 \times 10^{-8} \text{ mm}^2 / 8.5 \times 10^{-4} \text{ mm}$ | 20) $10.110 \text{ cm} \times 1.78 \text{ cm}$ |
| 9) $41.025 \text{ cm} - 23.38 \text{ cm} + 62.47 \text{ cm}$ | 21) $(4.56 + 38.66) \times 19.1$ |
| 10) $282.2 \text{ ft} \times 638.1 \text{ ft} - 15 \text{ ft}^2$ | 22) $9.022 \times 10^{24} \text{ amu} / 1.36 \times 10^{26} \text{ amu}$ |
| 11) $3.419 \text{ g} + 200.05 \text{ g} - 15.0001 \text{ g}$ | 23) $6.022 \times 10^{23} \text{ amu} - 1.66 \times 10^{22} \text{ amu}$ |
| 12) $12.3 \times 1.0000 \times 10^5$ | 24) $23 \times 15 \times 1.5$ |