Significant Figures Extra Practice - KEY

Determine how many significant figures there are in each of the following:

1. 456003 — 6 sig figs
2. 2010 — 3 sig figs
3. 0.004501 — 4 sig figs
4. 300 — 1 sig figs
5. 125.00 — 5 sig figs
6. 0.0250 — 3 sig figs
7. 0.0001 — 1 sig figs
8. 12000 — 2 sig figs

Please perform the following calculations and write the answer with the correct number of significant figures:

1. 12.48 g + 0.234 g = 12.714 g = 12.71 g with correct sig figs
2. 123 mm x 4567 mm = 561741 mm^2 = 562000 mm^2 with correct sig figs
3. 670 L / 45.3 L 14.7903 L = 15 L with correct sig figs
4. (2.010 cm – 0.980 cm) x (23.45 cm + 4.7 cm) = (1.030 cm) x (28.2 cm)

   = 28.9945 cm^2 = 29.0 cm^2 with correct sig figs
5. (210 m + 123 m) x (12.9 m – 2.35 m) = (330 m) x (10.6 m) = 3498 m^2 = 3500 m^2

Please write each of the following numbers in scientific notation after rounding to 2 significant figures:

1. 2357809 = 2.4×10^{6}
2. 0.00079823 = 8.0×10^{-4}
3. 145.890 = 1.5×10^{2}
4. 0.00600 = 6.0×10^{-3}
5. 2090 = 2.1×10^{3}