Calculator Practice Sheet

Compute each of the following and express your answer in scientific notation, rounded to five significant digits. (See page 25 of your textbook.) One or two problems of this sort will be on a future quiz or test.

1. $\sqrt[3]{\pi^4 + \sqrt{17}}$ *Answer:* 4.6652.
2. $\dfrac{(7.2034 \times 10^{-9})(1.2976 \times 10^{3})}{3.6123 \times 10^{-4}}$ *Answer:* 2.5876×10^{-2}.
3. $(145e^5)^{\cdot 2}$ *Answer:* 7.3548. (Look up the value of e.)
4. $\sqrt[3]{12^6 + 25^5} - \sqrt[4]{560}$ *Answer:* 2.2876×10^{2}.
5. Let $x = 1.2343 \times 10^{20}$. Compute: $\dfrac{x^2 + 3x}{\sqrt{x}}$. *Answer:* 1.3713×10^{30}.
6. Let $Q = 3.2123 \times 10^{6}$ and $H = 4.3212 \times 10^{-3}$. Compute $3Q^2H^3 - QH^2/6$. *Answer:* 2.4978×10^{6}.
7. Let $\theta = 5.6765 \times 10^{3}$. Compute $\dfrac{\pi\theta^2 - 34,654,000}{4.2342 \times 10^{8} - \theta^3}$. *Answer:* -3.6483×10^{-4}.
8. Let $\rho = 3.2312$ and $P = 7\pi$. Compute $\sqrt[4]{(\rho^3 - P)/(\rho - 2)^{1.3}}$. *Answer:* 1.7302.
9. Compute r if $\sqrt{r^3 - 3.4320 \times 10^{8}} = 1.3236 \times 10^{4}$. *Answer:* 8.0332×10^{2}.
10. Compute α if $\dfrac{\alpha + 3.4001}{\alpha - 2.1203} = 5.8890 \times 10^{-2}$. *Answer:* 3.7455.