

Mathematical Concepts — Joysheet 1
MAT 117, Spring 2013 — D. Ivanšić

Name: Sant Ocean
Show all your work!

Use your calculator to compute each expression to 6 significant digits accuracy or six decimal places, whichever is more accurate. Write down the sequence of keys you entered in order to compute each expression. Do not round numbers in mid-computation.

graphing calculator
 scientific

1. (5pts) $\sqrt[5]{23} = \boxed{1.872171}$

$23^{(1/5)}$
 23 $\frac{1}{5}$

2. (9pts) $1575 \left(1 + \frac{0.05}{4}\right)^{20} = \boxed{2019.20864}$

$1575 * (1 + 0.05/4)^{20}$
 1 0.05 \div 4 + 1 \wedge 20 * 1575

3. (7pts) $13(\sqrt[5]{4.25} - 1) = \boxed{4.362855}$

$13 * (4.25^{(1/5)} - 1)$
 4.25 $\sqrt[5]$ - 1 * 13

4. (6pts) $\frac{\log 0.336}{\log 6.63} = \boxed{-0.576571}$

$\log(0.336) / \log(6.63)$
 0.336 \log \div 6.63 \log

5. (9pts) $\frac{\log 7.32}{4 \log 1.012} = \boxed{41.719380}$

$\log(7.32) / (4 * \log(1.012))$
 7.32 \log \div (4 1.012 \log)

6. (12pts) $\frac{\left(1 + \frac{0.0275}{4}\right)^{28} - 1}{\frac{0.0275}{4}} = \boxed{30.760471}$

$(1 + 0.0275/4)^{28} - 1$ \div $(0.0275/4)$
 1 + 0.0275 \div 4 \wedge 28 - 1
 \div (0.0275 \div 4)

7. (12pts) $\frac{1 - \left(1 + \frac{0.03875}{12}\right)^{-48}}{\frac{0.03875}{12}} = \boxed{44.398739}$

$1 - (1 + 0.03875/12)^{-48}$ \div $(0.03875/12)$
 1 - (1 + 0.03875 \div 12) \wedge 48 \div (0.03875 \div 12)