ACT
MAA4212 3009

Class-F

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ACTroglodytes. Please write **DNE** in a blank if the described object does not exist or if the indicated operation cannot be performed.

F3: Show no work.

z5 Hitting the [R]eply key and then **not** editing both the SUBJECT: and TO: headers, marks one as a heinous "Space Cadet(te)", rightfully subject to eternal scorn, banishment, the heartbreak of psoriasis, and confinement to an Inner Circle of *Dante's Inferno*.

True. ***Mea culpa*, but at least I use turn-signals.**

a Blanks$\in\mathbb{R}$. So $\frac{1}{2+3\boldsymbol{i}}=$ ⌊ ⌋ $+\boldsymbol{i}\cdot$ ⌊ ⌋.

And $\dfrac{7-2\boldsymbol{i}}{2+3\boldsymbol{i}}=$ ⌊ ⌋ $+\boldsymbol{i}\cdot$ ⌊ ⌋.

By the way, $|5-3\boldsymbol{i}|=$ ⌊ ⌋.

b Sqroot of $\boldsymbol{i}-1$ in the upper-halfplane is $r\cdot\mathrm{cis}(\theta)$, where $r=$ ⌊ ⌋ $\in\mathbb{R}_+$ and $\theta=$ ⌊ ⌋ $\in[0,\frac{\pi}{2}]$.

The sqroot of $\boldsymbol{i}-1$ in the 1st-quadrant is $r\cdot\mathrm{cis}(\theta)$, where $r=$ ⌊ ⌋ $\in\mathbb{R}_+$ and $\theta=$ ⌊ ⌋ $\in[0,\frac{\pi}{2}]$.

c Below, each $g_n, f:[0,1]\circlearrowleft$ and $g_n \overset{\text{ptwise}}{\longrightarrow} f$, as $n\to\infty$.

If each g_n and f cts, then uniform-convergence. T F

If $\vec{\mathbf{g}}$ is nested and each g_n cts, then f is cts. T F

d15 If $g:\mathbb{R}\circlearrowleft$ is differentiable with $g'(3)=7$, then g is strictly-incr on some open interval about 3. T F

End of Class-F

F-Home:	___ ___ ___	165pts
F3:	___ ___	80pts
No name, or no honor code:	___	−5pts
Unstapled, or no ordinal :	___	−5pts
Total:	___ ___ ___	245pts

Please PRINT your name and ordinal. Ta:

Ord:

⌊ ⌋

HONOR CODE: *"I have neither requested nor received help on this exam other than from my professor."*

Signature:

⌊ ⌋