

Name: _____

Please remain in your seat with nothing other than a writing utensil, calculator, and a water bottle if needed.

Each question on this exam will ask you specific questions, so be sure to read the directions thoroughly. If you do not understand a direction please come up to ask.

When doing your problems. Please ensure that your writing is neat and can be logically followed. If you think your work is suspicious, odds are I will too. So, please do not allow that to happen.

For the purpose of this exam please leave your answers in fraction form unless otherwise noted.

You shall have the remainder of this class and the time in between classes to take this exam. If you happen to need all the time, I will be happy to write you a pass.

Good luck and try your best!

2	3	4	Total
16	8	16	40

1. (12pts) Find $(z + w)$, $(z \times w)$ and $(\frac{w}{z})$ when $z = 6 - 3i$ and $w = 4 + 4i$

2. (4pts) Find the moduli of $(z \times w)$ when z and w are as above.

3. (4pts) Find the moduli of $z = 3 + 4i$

4. (4pts) Find the moduli of $w = 3 - 2i$

5. (8pts) Explain in words how you would graph the complex number $z = 2 - 2i$

6. (8 pts) Explain in words how you would graph the complex number $w = 7 + 7i$