**Operations in the Complex Plane**

For this assignment, perform the required operations with the complex numbers as listed. Once you have reached an answer, turn it into an ordered pair and graph it on a sheet of graph paper with the modulus. *Find the modulus and the argument for numbers 1 – 5.* Be sure to record all your answers in the table provided.

|  |  |  |  |
| --- | --- | --- | --- |
| Number | Problem | Answer | Ordered Pair |
| 1 | (3 – 8*i*) + (-3 + 13*i*) |  |  |
| 2 | Add 4 to answer 1 |  |  |
| 3 | (7 + 4*i*) – (2+5*i*) |  |  |
| 4 | (Answer 3) +(1 – 6*i*) |  |  |
| 5 | Triple (3 - 8/3*i*) |  |  |
| 6 | 2(5 - 3*i*) |  |  |
| 7 | (Answer 6) – (1 – 2*i*) |  |  |
| 8 | (16 +4*i*)/2 |  |  |
| 9 | (5 + 3*i*) – (-3– 2*i*) |  |  |
| 10 | Add 3 to answer 9 |  |  |
| 11 | (Answer 10) – (-4*i*) |  |  |
| 12 | 2 + 9*i* |  |  |
| 13 | (4+7*i*) – 10 |  |  |
| 14 | (answer 13) – (-5 + 3*i*) |  |  |
| 15 | (5 + 0*i*)(1 + *i*) |  |  |
| 16 | 3(-2 – 5/3*i*) |  |  |
| 17 | (-2)3 - √-49 |  |  |
| 18 | (-12- 9*i*) + 7 |  |  |
| 19 | -3 – 7*i* |  |  |
| 20 | (1+ *i*) – 3( 1+2*i*) |  |  |
| 21 | -2(.5 + *i*) |  |  |