Algebra II Class Worksheet #5 Unit 5 page 1 _____

Perform the indicated operations. Answers which are complex numbers must be expressed using a + bi form.

1. $\dfrac{8i}{4i} =$

2. $\dfrac{8}{4i} =$

3. $\dfrac{6+9i}{3} =$

4. $\dfrac{4-9i}{6} =$

5. $\dfrac{4-8i}{4i} =$

6. $\dfrac{4-2i}{-2i} =$

7. $\dfrac{5+6i}{-3i} =$

8. $\dfrac{3+7i}{3i} =$

9. $\dfrac{6+17i}{4+3i} =$

10. $\dfrac{17+i}{3-i} =$

11. $\dfrac{-13-13i}{2-3i} =$

12. $\dfrac{22-7i}{3+2i} =$

Perform the indicated operations. Answers which are complex numbers must be expressed using a + bi form.

13. $\dfrac{3 + 5i}{1 - 2i}$ =

14. $\dfrac{4 - i}{1 + 3i}$ =

15. $\dfrac{5}{1 + 2i}$ =

16. $\dfrac{-2}{3 - i}$ =

17. $\dfrac{5i}{1 + 2i}$ =

18. $\dfrac{-2i}{3 - i}$ =

Write the multiplicative inverse of each of the following using a + bi form.

19.   4 + 3i   _____

20.   3 – i   _____