

Friday, March 20, 2020 Review of Complex Numbers

Simplify.

1) $(3i) + (4i)$

2) $(-7 - 8i) + 3$

3) $(3 + 7i) - (-8 - 4i)$

4) $(3 + 5i) - (4 - i)$

5) $(-5 + 4i) + (-10 + 12i)$

6) $(9i) - (11 + 7i) + 8$

7) $(7 + 7i) - (-2 + 8i) + (-2 - 3i)$

8) $(-8 + 2i) + 5 + (-2 + 2i)$

$$9) (-3 - 4i)(5 + 3i)$$

$$10) (1 - 3i)^2$$

$$11) (9 - 5i)(9 + 5i)$$

$$12) (3 - 3i)^2$$

Simplify. Your answers need to simplify to square root of -1, -1, -i, or 1.

$$13) i^{51}$$

$$14) i^{65}$$

$$15) i^{84}$$

$$16) i^{102}$$