

## Unit 5.1 Operations with Complex numbers Practice

Period \_\_\_\_\_

**Simplify.**

1)  $(2 - i) - (2i)$

$2 - 3i$

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

$5i$

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

$-7 - 5i$

4)  $(2 - 6i) + (-4 - 4i)$

$-2 - 10i$

5)  $(5 - 7i) - (-1 + i)$

$6 - 8i$

6)  $(2 - 4i) + (-7 + 7i)$

$-5 + 3i$

7)  $(6i) + (-6 - 5i) - (-6 + 7i)$

$-6i$

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

$15 + 13i$

9)  $(8 + 4i) + (i) + (-2 + 8i)$

$6 + 13i$

10)  $(4i)(2i)$

$-8$

11)  $(-5i)(-5i)$

$-25$

12)  $(i)^2$

$-1$

13)  $(2 + i)^2$

$3 + 4i$

14)  $(-3i)(2i)(-7 + 5i)$

$-42 + 30i$

$$15) (8i)(-2i)(8 + 7i)$$

$$128 + 112i$$

$$16) (6i)(-1 - 6i)(-2 + 7i)$$

$$-30 + 264i$$

$$17) (2i)(-6 - i)(-6 + 8i)$$

$$84 + 88i$$

$$18) (8i)(-4 + 6i)(-5 + 3i)$$

$$336 + 16i$$

$$19) -8(2i) + 6$$

$$6 - 16i$$

$$20) (i)(-4 - 6i)$$

$$6 - 4i$$

$$21) (-7i) + (i)(-5i)$$

$$5 - 7i$$

$$22) (-5 - i) + (5 + 5i)$$

$$4i$$

$$23) (7 - 5i) - (-3 - 4i)$$

$$10 - i$$

$$24) (-2i)(7i)(-3 + 2i)$$

$$-42 + 28i$$

$$25) (4i)(8 - 7i)(-7 - 2i)$$

$$-132 - 280i$$

$$26) (5i)(-8 + 5i)(-2 - 4i)$$

$$-110 + 180i$$

$$27) (-2 - 6i) + 8 - (-8 + 2i)$$

$$14 - 8i$$

$$28) (7i)(-8i)(-5 + 6i) + (5i) + 8 - (-6 + 5i)$$

$$-266 + 336i$$