

Practice adding, subtracting, and multiplying complex numbers (A2 3.5)

Simplify.

1) $(8 + i) + (5 - 2i)$

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

3) $(-7 - i) + (6 + 4i)$

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

5) $(7 - 8i) + (-1 + 7i)$

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

7) $5 - (-3 + 4i) + 8$

8) $(-7 - 6i) + (-1 + 2i)$

9) $(4 + i) - 8 + (3i)$

10) $(-6 + 6i) + (-7 - 5i)$

11) $(-3 - 6i)(-8 + 2i)$

12) $(-4 + 7i)(7 - 4i)$

$$13) (-6 - 3i)(-6 - 5i)$$

$$14) (-8 + 2i)(3 + 5i)$$

$$15) (-5 - 3i)(-5 + 6i)$$

$$16) (-3 + 4i)(-1 + 6i)$$

$$17) (-4 + 4i)(-8 - 5i)$$

$$18) (-8 - 4i)(-8 + 7i)$$

$$19) (6 - 6i)^2$$

$$20) (2 - 5i)(7 + 5i)$$

$$21) -8(2 - 3i) + (8i)(-1 - i)$$

$$22) -6(-4i) - 6(-7 + 4i)$$

$$23) 4(-5 + 6i) + 2(-4 - 7i)$$

$$24) (-2i) + (4i) - (8 + 4i)$$

$$25) 6(6i) - 3(4 + i)$$

$$26) (5i)(5i)(8 - i)$$

Answers to Practice adding, subtracting, and multiplying complex numbers (A2 3.5)

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|-----------------|------------------|-----------------|-----------------|
| 1) $13 - i$ | 2) $5 - 8i$ | 3) $-1 + 3i$ | 4) $-i$ |
| 5) $6 - i$ | 6) $-i$ | 7) $16 - 4i$ | 8) $-8 - 4i$ |
| 9) $-4 + 4i$ | 10) $-13 + i$ | 11) $36 + 42i$ | 12) $65i$ |
| 13) $21 + 48i$ | 14) $-34 - 34i$ | 15) $43 - 15i$ | 16) $-21 - 22i$ |
| 17) $52 - 12i$ | 18) $92 - 24i$ | 19) $-72i$ | 20) $39 - 25i$ |
| 21) $-8 + 16i$ | 22) 42 | 23) $-28 + 10i$ | 24) $-8 - 2i$ |
| 25) $-12 + 33i$ | 26) $-200 + 25i$ | | |