

The expression $\frac{(i+2)}{i}$ is equivalent to which of the following?

- a. 1
- b. $1+2i$
- c. $1-2i$
- d. $i-2$

The expression $\frac{(i+8)}{i}$ is equivalent to which of the following?

- a. $1+8i$
- b. $i-8$
- c. $1-8i$
- d. 7

$i(i^5+7)-6=?$

- a. $7i+1$
- b. $-6+7i$
- c. $1-7i$
- d. $-7+7i$

$i(i^5+3)+9=?$

- a. $3i+12$
- b. $12-3i$
- c. $8+3i$
- d. $9+3i$

- Which of the following is equivalent to $6i(-7i + 9) - 2(1 - 2i)$ in the form $a + bi$?
- a. $44 + 50i$
 - b. $40 + 58i$
 - c. $-40 + 50i$
 - d. $-52 - 46i$

- Which of the following is equivalent to $-7i(-2i + 8) + 5(-7 - 4i)$ in the form $a + bi$?
- a. $21 - 36i$
 - b. $49 - 36i$
 - c. $-49 - 76i$
 - d. $91 + 34i$

- Which of the following is equivalent to i^{78} ?
- a. -1
 - b. 1
 - c. $-i$
 - d. i

- Which of the following is equivalent to i^{98} ?
- a. $-i$
 - b. -1
 - c. i
 - d. 1

- Which of the following is the complex conjugate of $-10 - 4i$.
- a. $-10 + 4i$
 - b. $4 + 10i$
 - c. $10 - 4i$
 - d. $10 + 4i$

- Which of the following is the complex conjugate of $14 - 11i$.
- a. $14 + 11i$
 - b. $-14 - 11i$
 - c. $-14 + 11i$
 - d. $11 - 14i$

- Which of the following shows the solutions for $x^4 - 16x^2 - 80 = 0$?
- a. $x = -2i, 2i, 2\sqrt{5}, \text{ or } -2\sqrt{5}$
 - b. $x = -2, 2, 2\sqrt{5}, \text{ or } -2\sqrt{5}$
 - c. $x = -2, 2, 2\sqrt{5}i, \text{ or } -2\sqrt{5}i$
 - d. $x = -2i, 2i, 2\sqrt{5}i, \text{ or } -2\sqrt{5}i$

- Which of the following shows the solutions for $x^4 - 19x^2 - 20 = 0$?
- a. $x = -1, 1, 2\sqrt{5}, \text{ or } -2\sqrt{5}$
 - b. $x = -i, i, 2\sqrt{5}, \text{ or } -2\sqrt{5}$
 - c. $x = -i, i, 2\sqrt{5}i, \text{ or } -2\sqrt{5}i$
 - d. $x = -1, 1, 2\sqrt{5}i, \text{ or } -2\sqrt{5}i$

The expression $\frac{-7+2i}{-4+6i}$ is equivalent to which of the following?

- a. $\frac{-40+34i}{52}$
- b. $\frac{40-34i}{52}$
- c. $\frac{-40-34i}{52}$
- d. $\frac{40+34i}{52}$

The expression $\frac{4+3i}{-4+8i}$ is equivalent to which of the following?

- a. $\frac{8+44i}{80}$
- b. $\frac{8-44i}{80}$
- c. $\frac{-8-44i}{80}$
- d. $\frac{-8+44i}{80}$

The expression $(4+2i)(-1+5i)(2+4i)$ is equivalent to which of the following?

- a. $-100-20i$
- b. $-100+20i$
- c. $100-20i$
- d. $100+20i$

The expression $(5-3i)(1+3i)(-4-4i)$ is equivalent to which of the following?

- a. $-8-104i$
- b. $8-104i$
- c. $-8+104i$
- d. $8+104i$

The expression $(7 + 8i)(9 + 7i^2)$ is equivalent to which of the following?

a. $14 + 16i$
b. $14 - 16i$
c. $-14 - 16i$
d. $-14 + 16i$

The expression $(6 + 9i)(3 + 6i^2)$ is equivalent to which of the following?

a. $18 - 27i$
b. $18 + 27i$
c. $-18 - 27i$
d. $-18 + 27i$

The expression $\frac{65 + 25i}{50}$ is equivalent to which of the following?

a. $\frac{-9 + 4i}{5 + 5i}$
b. $\frac{9 - 4i}{5 - 5i}$
c. $\frac{-9 - 4i}{-5 - 5i}$
d. $\frac{9 + 4i}{-5 + 5i}$

The expression $\frac{37 - 50i}{73}$ is equivalent to which of the following?

a. $\frac{7 + 2i}{3 + 8i}$
b. $\frac{-7 - 2i}{3 - 8i}$
c. $\frac{7 - 2i}{-3 - 8i}$
d. $\frac{-7 + 2i}{-3 + 8i}$

The expression $-26 - 104i$ is equivalent to which of the following?

- a. $(-1 + 5i)(1 + 4i)(1 + 5i)$
- b. $(1 + 5i)(-1 + 4i)(1 + 5i)$
- c. $(1 + 5i)(1 + 4i)(-1 + 5i)$
- d. $(-1 + 5i)(-1 + 4i)(-1 + 5i)$

The expression $34 + 62i$ is equivalent to which of the following?

- a. $(-4 - 2i)(1 + 3i)(-4 + 3i)$
- b. $(4 - 2i)(-1 + 3i)(-4 + 3i)$
- c. $(4 - 2i)(1 + 3i)(4 + 3i)$
- d. $(-4 - 2i)(-1 + 3i)(4 + 3i)$

The expression $75 + 90i$ is equivalent to which of the following?

- a. $(-5 - 6i)(-6 + 9i^2)$
- b. $(5 - 6i)(-6 + 9i^2)$
- c. $(5 - 6i)(6 + 9i^2)$
- d. $(-5 - 6i)(6 + 9i^2)$

The expression $(3 - 4i)(-2 - 9i^2) - 5$ is equivalent to which of the following?

- a. $16 + 28i$
- b. $16 - 28i$
- c. $-16 - 28i$
- d. $-16 + 28i$

The expression $(8 - 7i)(8 - 3i^2) + 3$ is equivalent to which of the following?

- a. $91 + 77i$
- b. $-91 + 77i$
- c. $91 - 77i$
- d. $-91 - 77i$

The expression $(-5 + 5i)(1 + 4i)(-5 - 2i) + 7$ is equivalent to which of the following?

- a. $-102 - 125i$
- b. $-102 + 125i$
- c. $102 - 125i$
- d. $102 + 125i$

The expression $(4 - 4i)(-4 - 2i)(-3 - 2i) - 8$ is equivalent to which of the following?

- a. $80 + 24i$
- b. $-80 - 24i$
- c. $80 - 24i$
- d. $-80 + 24i$

The expression $(1 - 4i)(-2 - 5i^2) - 4 - 9i$ is equivalent to which of the following?

- a. $1 - 21i$
- b. $1 + 21i$
- c. $-1 + 21i$
- d. $-1 - 21i$

The expression $(-7 - 5i)(-4 - 2i^2) + 1 + 9i$ is equivalent to which of the following?

- a. $-15 + 19i$
- b. $-15 - 19i$
- c. $15 + 19i$
- d. $15 - 19i$

The expression $(-1 - 5i)(1 + 2i)(3 - 5i) - 7 - 9i$ is equivalent to which of the following?

- a. $-15 + 75i$
- b. $15 + 75i$
- c. $-15 - 75i$
- d. $15 - 75i$

The expression $(-5 - 3i)(-4 + 2i)(1 + 5i) - 2 - 7i$ is equivalent to which of the following?

- a. $14 - 125i$
- b. $-14 + 125i$
- c. $14 + 125i$
- d. $-14 - 125i$

The expression $(7i - 5i^2)(9i - 6i^2)$ is equivalent to which of the following?

- a. $-33 + 87i$
- b. $33 + 87i$
- c. $-33 - 87i$
- d. $33 - 87i$

The expression $(6i - 4i^2)(9i - 6i^2)$ is equivalent to which of the following?

- a. $30 + 72i$
- b. $-30 - 72i$
- c. $-30 + 72i$
- d. $30 - 72i$

Given $a = -9 + 4i$ and $b = -9 - 4i$, what is the product ab ?

Given $a = 2 + 2i$ and $b = 2 - 2i$, what is the product ab ?

Given $a = \sqrt{1} + 7i$ and $b = \sqrt{1} - 7i$, what is the product ab ?

Given $a = \sqrt{6} + 9i$ and $b = \sqrt{6} - 9i$, what is the product ab ?

Given $a = \sqrt{6} + 9i$ and $b = \sqrt{6} - 9i$, what is the product ab ?