

Complex numbers

$$(-8 + 4i)(1 - i)$$

Which of the following is equivalent to the complex number shown above?

Note:  $i = \sqrt{-1}$

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(A)  $-12 + 4i$

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(B)  $-12 + 12i$

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(C)  $-4 + 12i$

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(D)  $-4 + 4i$

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$$(4 + i)^2$$

Which of the following is equivalent to the complex number shown above?

Note:  $i = \sqrt{-1}$

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(A)  $15 + 8i$

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(B)  $15 - 8i$

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(C)  $17 + 8i$

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(D)  $17 - 8i$

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Complex numbers

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

Which of the following is equivalent to the complex number shown above?

Note:  $i = \sqrt{-1}$

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A  $28 - 24i$

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B  $28 + 8i$

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C  $36 - 24i$

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D  $36 + 8i$

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

Which of the following is equivalent to the complex number shown above?

Note:  $i = \sqrt{-1}$

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A  $32 + 8i$

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B  $32 - 8i$

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C  $38 + 8i$

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D  $38 - 8i$

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Complex numbers

$$i^4 + 4i^2 + 4$$

Which of the following is equivalent to the complex number shown above?

Note:  $i = \sqrt{-1}$

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A 1

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B  $-1$

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C  $i + 4$

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D  $i - 4$

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