

PHYSICS

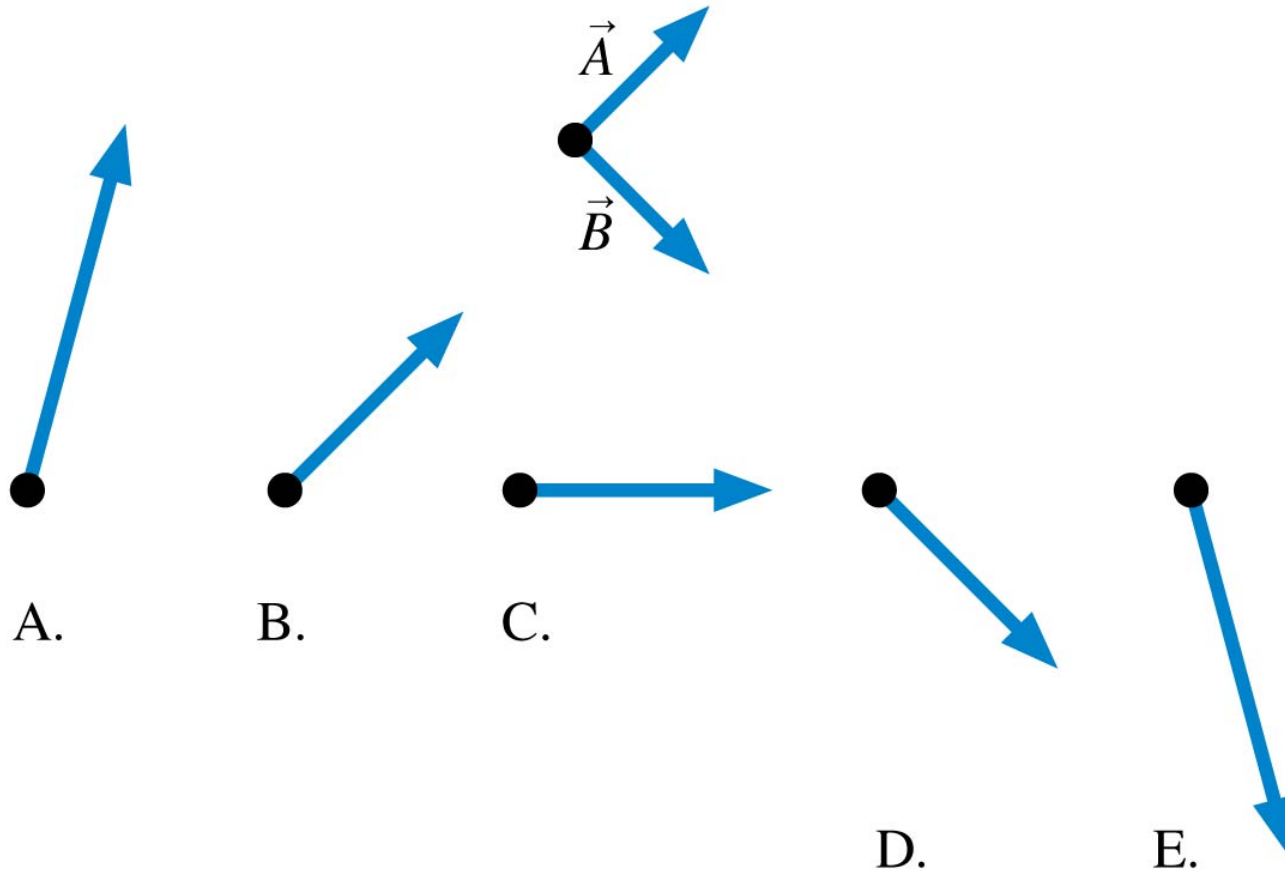
FOR SCIENTISTS AND ENGINEERS A STRATEGIC APPROACH 4/E

Chapter 3 QuickCheck Questions

RANDALL D. KNIGHT

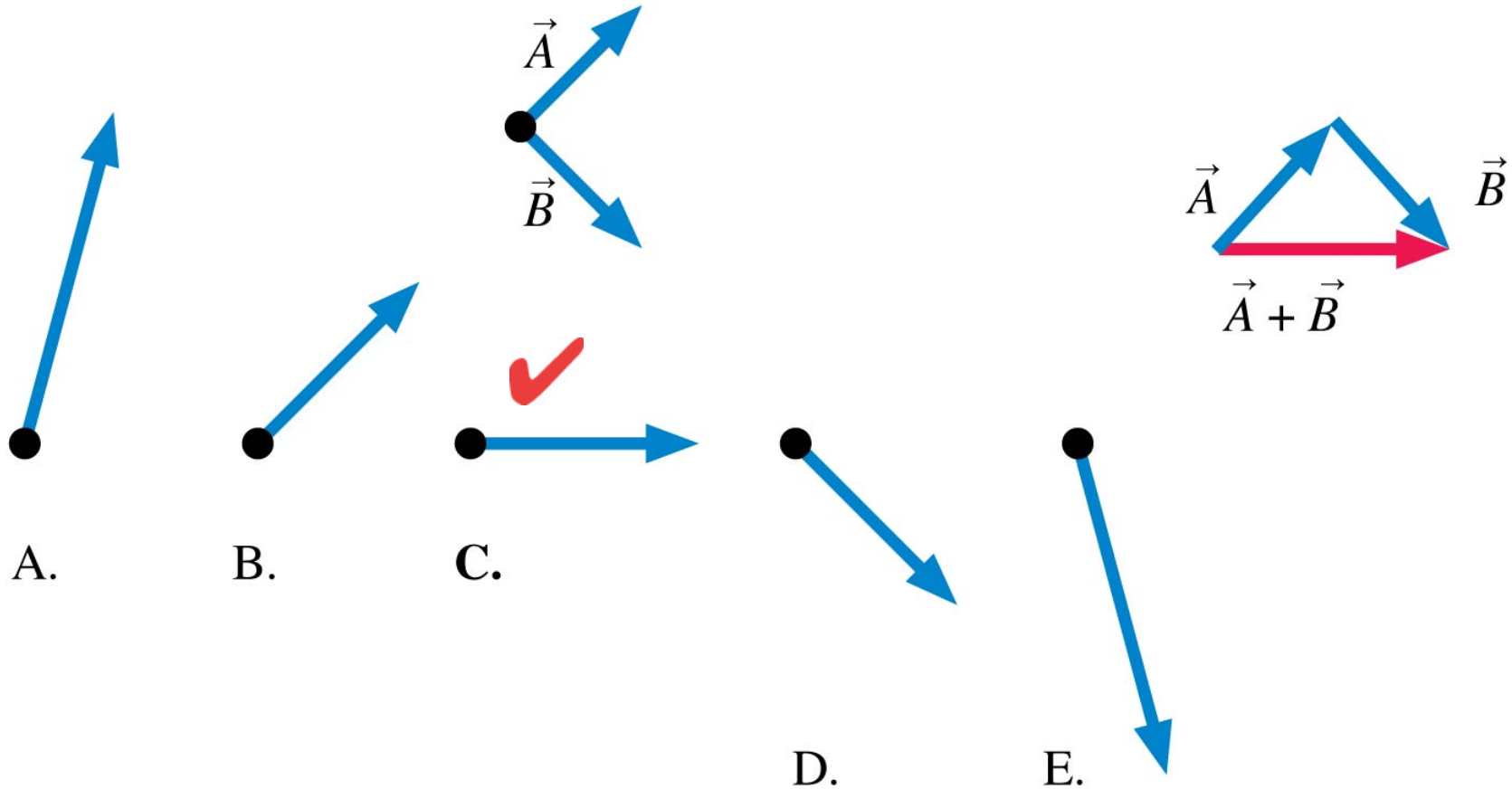
QuickCheck 3.1

Which of the vectors in the second row shows $\vec{A} + \vec{B}$?



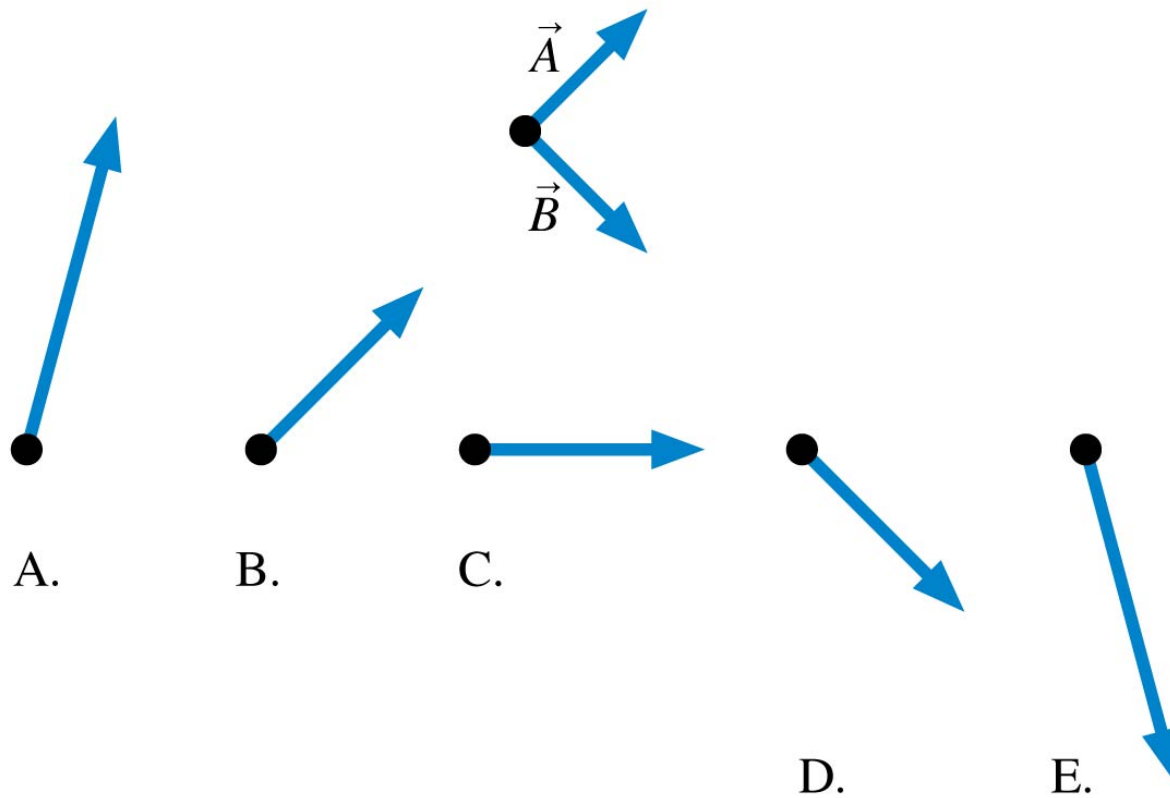
QuickCheck 3.1

Which of the vectors in the second row shows $\vec{A} + \vec{B}$?



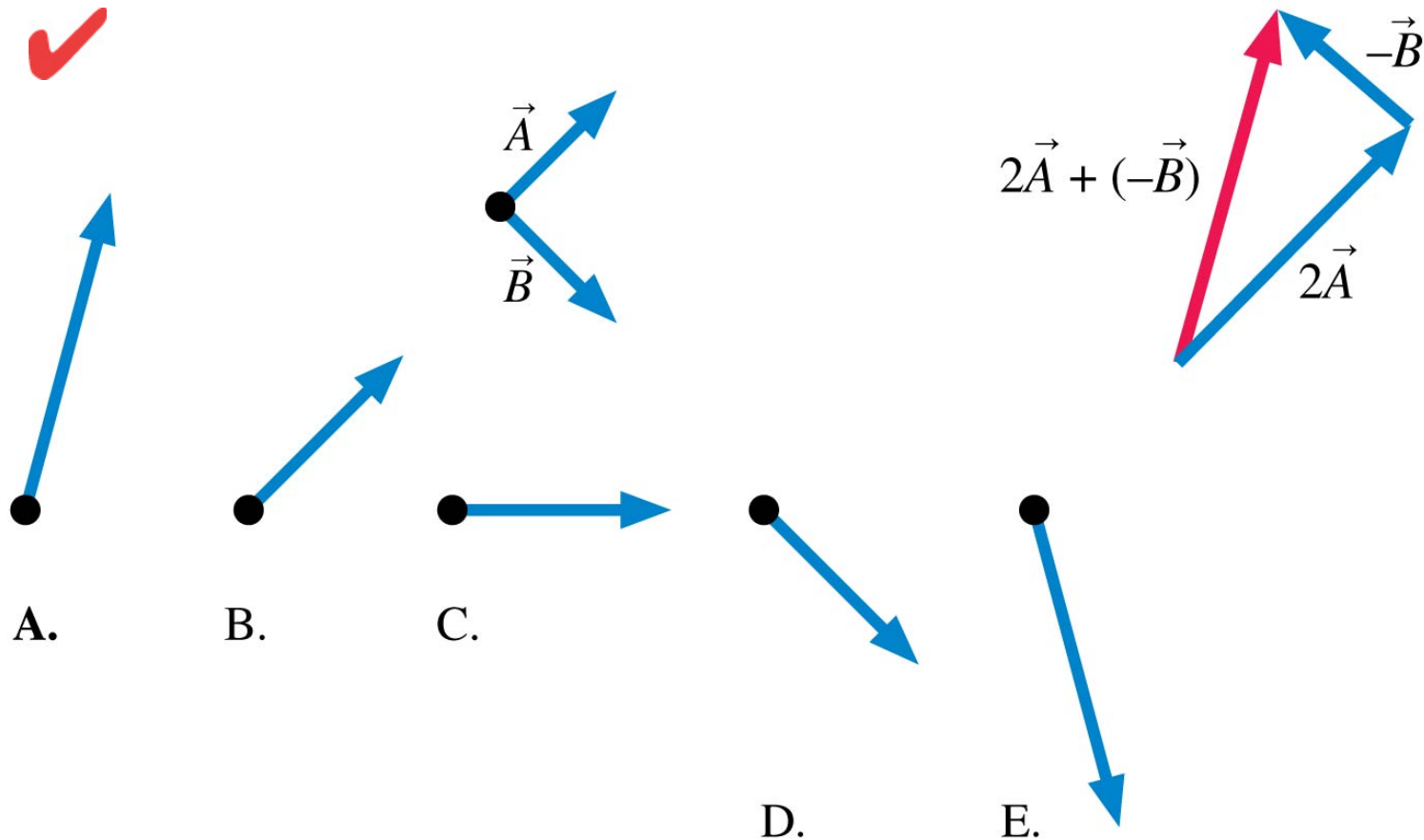
QuickCheck 3.2

Which of the vectors in the second row shows $2\vec{A} - \vec{B}$?



QuickCheck 3.2

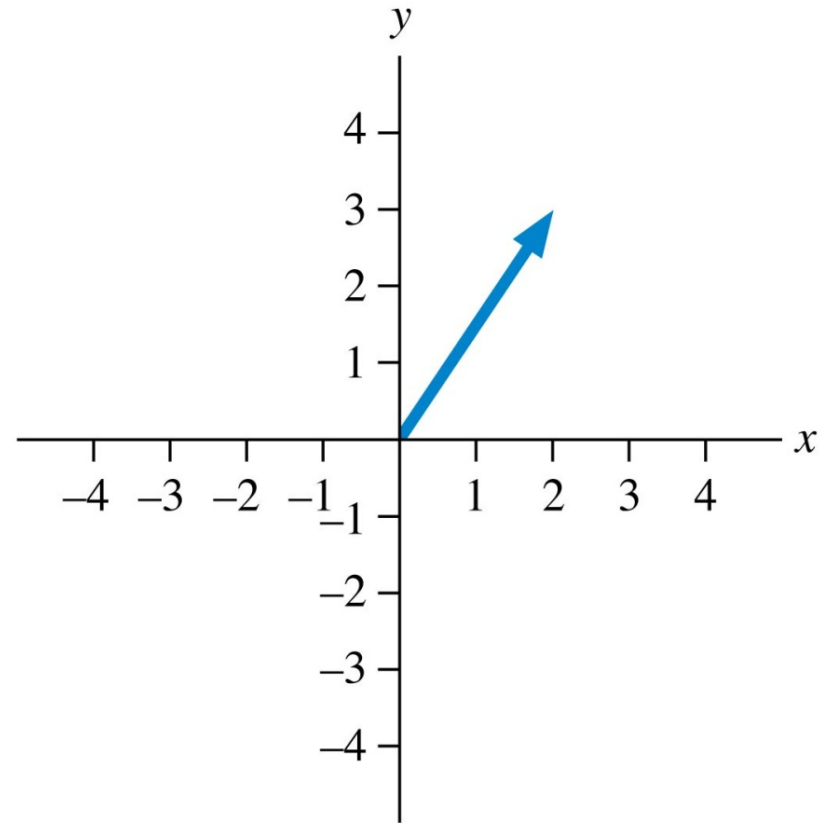
Which of the vectors in the second row shows $2\vec{A} - \vec{B}$?



QuickCheck 3.3

What are the x - and y -components of this vector?

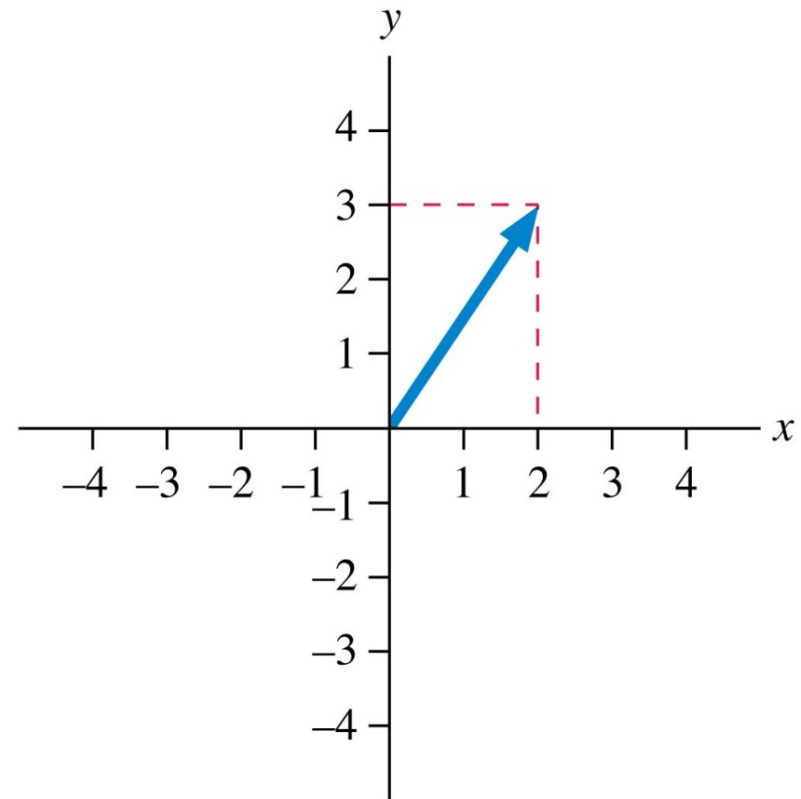
- A. 3, 2
- B. 2, 3
- C. -3, 2
- D. 2, -3
- E. -3, -2



QuickCheck 3.3

What are the x - and y -components of this vector?

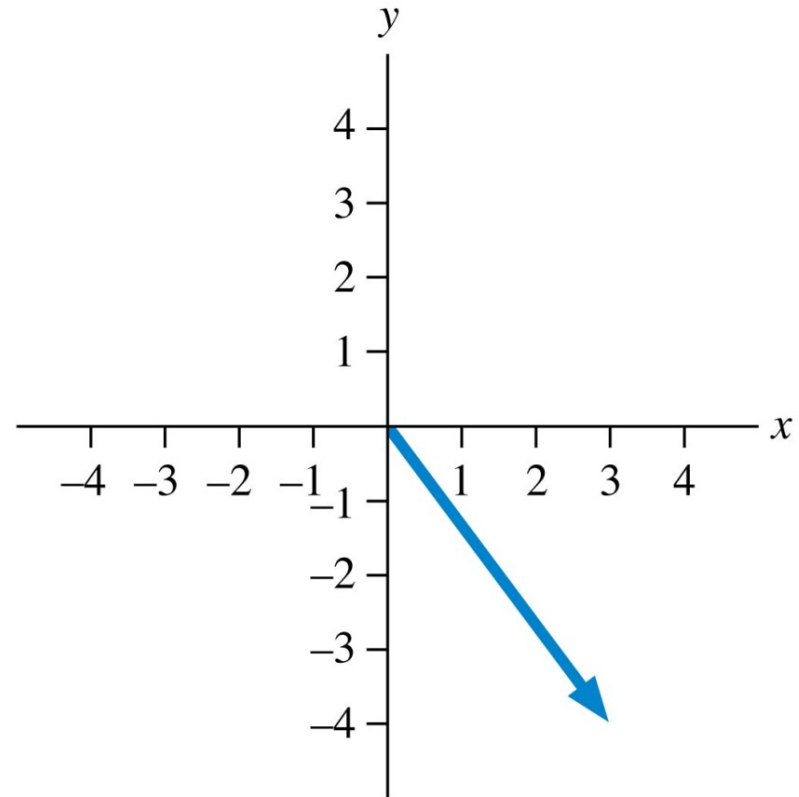
- A. 3, 2
- ✓ B. 2, 3
- C. -3, 2
- D. 2, -3
- E. -3, -2



QuickCheck 3.4

What are the x - and y -components of this vector?

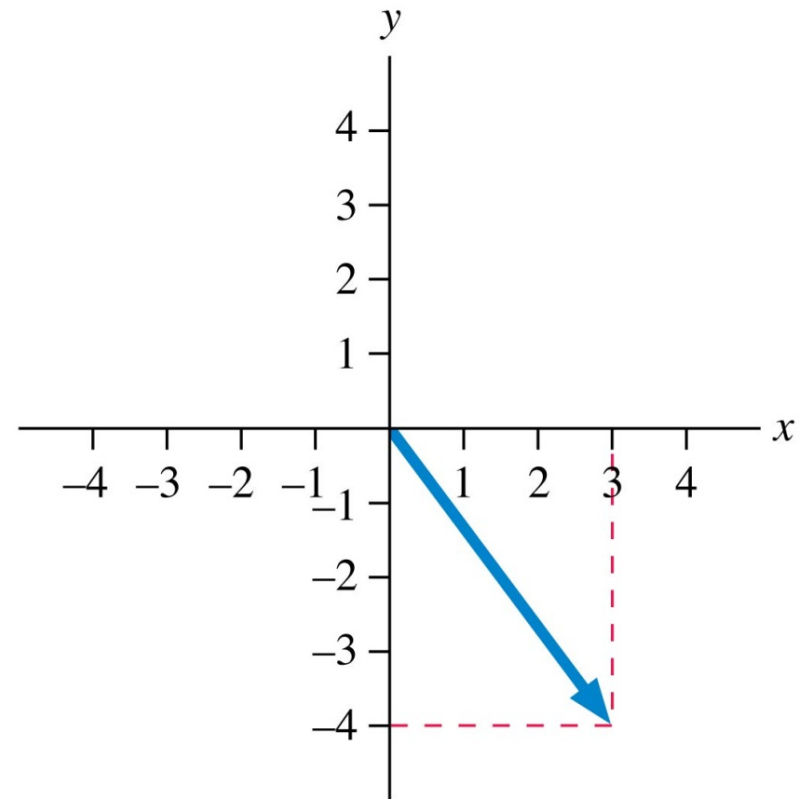
- A. 3, 4
- B. 4, 3
- C. -3, 4
- D. 4, -3
- E. -3, -4



QuickCheck 3.4

What are the x - and y -components of this vector?

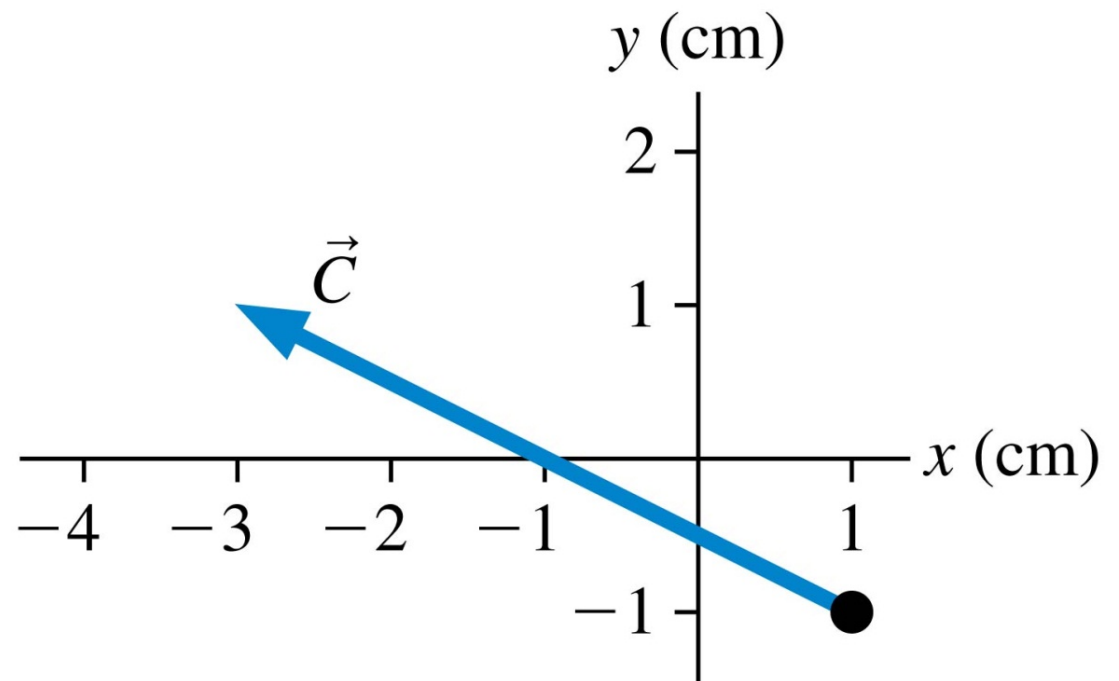
- A. 3, 4
- B. 4, 3
- C. -3, 4
- D. 4, -3
- ✓ E. -3, -4



QuickCheck 3.5

What are the x - and y -components of vector \vec{C} ?

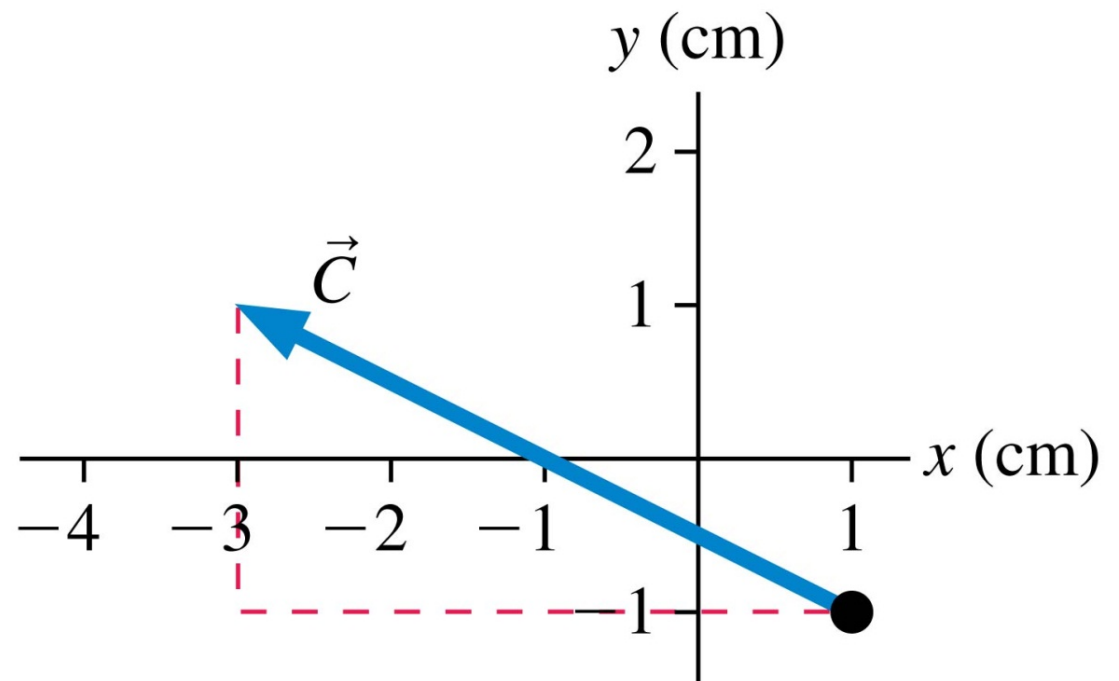
- A. 1, -3
- B. -3, 1
- C. 1, -1
- D. -4, 2
- E. 2, -4



QuickCheck 3.5

What are the x - and y -components of vector \vec{C} ?

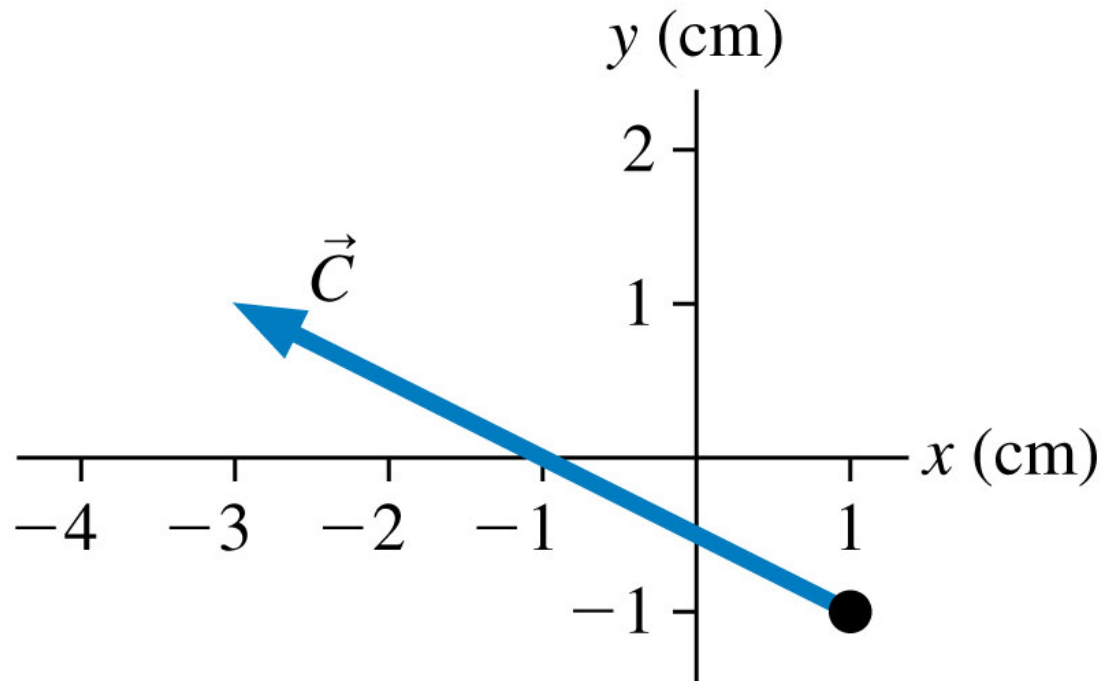
- A. 1, -3
- B. -3, 1
- C. 1, -1
- ✓ D. -4, 2
- E. 2, -4



QuickCheck 3.6

Vector \vec{C} can be written

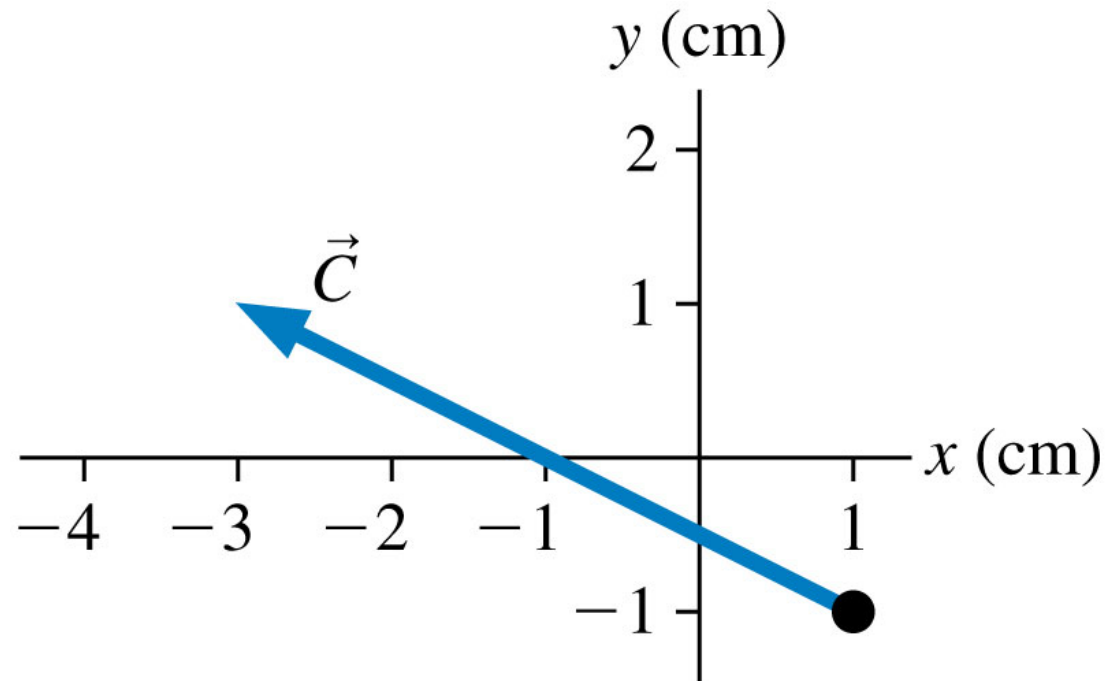
- A. $-3\hat{i} + \hat{j}$.
- B. $-4\hat{i} + 2\hat{j}$.
- C. $\hat{i} - 3\hat{j}$.
- D. $2\hat{i} - 4\hat{j}$.
- E. $\hat{i} - \hat{j}$.



QuickCheck 3.6

Vector \vec{C} can be written

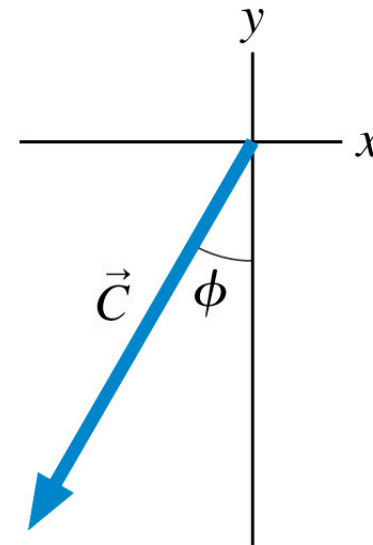
- A. $-3\hat{i} + \hat{j}$.
- ✓ B. $-4\hat{i} + 2\hat{j}$.
- C. $\hat{i} - 3\hat{j}$.
- D. $2\hat{i} - 4\hat{j}$.
- E. $\hat{i} - \hat{j}$.



QuickCheck 3.7

The angle ϕ that specifies the direction of vector \vec{C} is

- A. $\tan^{-1}(C_x/C_y)$
- B. $\tan^{-1}(C_y/C_x)$
- C. $\tan^{-1}(|C_x|/C_y)$
- D. $\tan^{-1}(|C_x|/|C_y|)$
- E. $\tan^{-1}(|C_y|/|C_x|)$



QuickCheck 3.7

The angle ϕ that specifies the direction of vector \vec{C} is

- A. $\tan^{-1}(C_x/C_y)$
- B. $\tan^{-1}(C_y/C_x)$
- C. $\tan^{-1}(|C_x|/C_y)$
- ✓ D. $\tan^{-1}(|C_x|/|C_y|)$
- E. $\tan^{-1}(|C_y|/|C_x|)$

