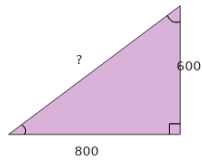




Determine vector magnitude

1

Find the length of the missing side as a decimal value based on the Pythagorean theorem



A 1,300

B 900

C 500

D 4,800

E 700

F 1,000

2

Find the magnitude of $\vec{v}$.

$$\vec{v} = [-8, -6]$$

A

$$|\vec{v}| = 15$$

B

$$|\vec{v}| = 14$$

C

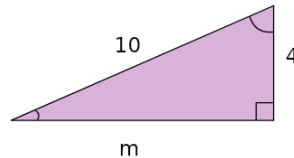
$$|\vec{v}| = 12$$

D

$$|\vec{v}| = 10$$

3

Find the length of the missing side as a square root value, based on the Pythagorean theorem



A

$$m = \sqrt{216}$$

B

$$m = \sqrt{184}$$

C

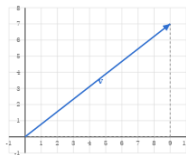
$$m = \sqrt{84}$$

D

$$m = \sqrt{284}$$

4

Write the magnitude of the vector as a square root expression.



A

$$|\vec{v}| = \sqrt{81 - 49}$$

B

$$|\vec{v}| = \sqrt{81 + 49}$$

C

$$|\vec{v}| = \sqrt{9 + 7}$$

D

$$|\vec{v}| = 9 + 7$$

5

Write the magnitude of the vector as a square root expression.



A

$$|\vec{v}| = \sqrt{81 - 16}$$

B

$$|\vec{v}| = \sqrt{9 + 4}$$

C

$$|\vec{v}| = \sqrt{81 + 16}$$

D

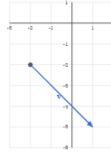
$$|\vec{v}| = 9 + 4$$



Determine vector magnitude

6

Write the magnitude of the vector as a square root expression.



A $|\vec{v}| = 3 + 3$

B $|\vec{v}| = \sqrt{3 + 3}$

C $|\vec{v}| = \sqrt{9 - 9}$

D $|\vec{v}| = \sqrt{9 + 9}$

7Write the magnitude of $\vec{v}$ as a square root expression.

$$\vec{v} = [5, 8]$$

A $|\vec{v}| = \sqrt{25 - 64}$

B $|\vec{v}| = \sqrt{25 + 64}$

C $|\vec{v}| = \sqrt{5 + 8}$

D $|\vec{v}| = 5 + 8$

8Write the magnitude of $\vec{v}$ as a square root expression.

$$\vec{v} = [7, -2, -6]$$

A $|\vec{v}| = \sqrt{49 - 4 - 36}$

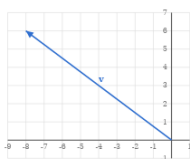
B $|\vec{v}| = \sqrt{49 + 4 + 36}$

C $|\vec{v}| = \sqrt{7 + 2 + 6}$

D $|\vec{v}| = 7 + 2 + 6$

9

Find the magnitude of the vector.



A $|\vec{v}| = 10$

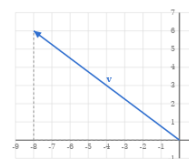
B $|\vec{v}| = 11$

C $|\vec{v}| = 9$

D $|\vec{v}| = 6$

10

Find the magnitude of the vector.



A $|\vec{v}| = 10$

B $|\vec{v}| = 15$

C $|\vec{v}| = 6$

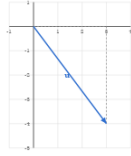
D $|\vec{v}| = 4$



Determine vector magnitude

11

Find the magnitude of the vector.



- | | | | |
|---|-----------------|---|-----------------|
| A | $ \vec{u} = 5$ | B | $ \vec{u} = 4$ |
| C | $ \vec{u} = 3$ | D | $ \vec{u} = 7$ |

12

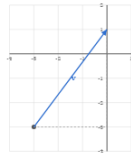
Find the magnitude of the vector from its components.

$$u_x = -6, \quad u_y = 8$$

- | | | | |
|---|------------------|---|------------------|
| A | $ \vec{u} = 10$ | B | $ \vec{u} = 11$ |
| C | $ \vec{u} = 4$ | D | $ \vec{u} = 14$ |

13

Find the magnitude of the vector.



- | | | | |
|---|------------------|---|-----------------|
| A | $ \vec{v} = 5$ | B | $ \vec{v} = 6$ |
| C | $ \vec{v} = 10$ | D | $ \vec{v} = 2$ |

14

Find the magnitude of the vector.



- | | | | |
|---|-----------------|---|-----------------|
| A | $ \vec{v} = 8$ | B | $ \vec{v} = 5$ |
| C | $ \vec{v} = 9$ | D | $ \vec{v} = 4$ |

15Find the magnitude of $\vec{v}$.

$$\vec{v} = [-1, 4, 8]$$

- | | | | |
|---|------------------|---|------------------|
| A | $ \vec{v} = 9$ | B | $ \vec{v} = 10$ |
| C | $ \vec{v} = 13$ | D | $ \vec{v} = 11$ |