

Adding Vectors

Total questions: 15

Worksheet time: 21mins

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Name

Class

Date

1.



How do you combine vectors if they are in opposite directions?

- a) Add
- b) Subtract
- c) Pythagorean Theorem
- d) Use trigonometry

2. When adding vectors graphically, the **magnitude** of the resultant vector is represented

- a) the length of the vector drawn
- b) the arrow head of the vector drawn
- c) both of the above
- d) none of the above

3.



A car travels 90 meters due north. Then the car turns around and travels 40 meters due south. What is the magnitude and direction of the car's resultant displacement?

- a) 40 meters, South
- b) 50 meters, South
- c) 50 meters, North
- d) 40 meters, North

4.



If a boomerang is thrown 20 m in a straight line and returns exactly to the spot it was thrown what is its displacement?

- a) 20m
- c) 0m

- b) 40m
- d) -20m

5. Vector is a quantity with:

- a) magnitude and direction
- c) direction

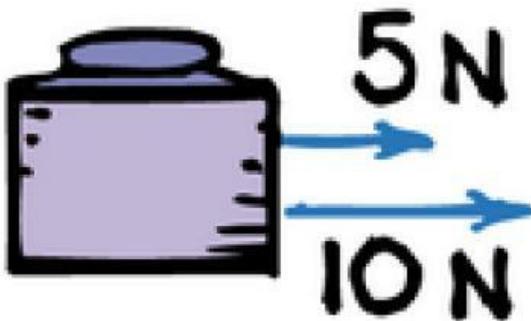
- b) magnitude
- d) none of the above

6. Is this a scalar quantity or a vector quantity?
Wind blowing at 20 knots

a) Scalar

b) Vector

7.



What is the Net Force?

- a) 5 N to the right
- c) 15 N to the right

- b) 10 N to the right
- d) 0 N

14.



In a tug of war the left team pulls with a force of 200N. The right team pulls with a force of 150N. What is the resultant force?

- a) 50N to the left.
 - b) 350N to the left.
 - c) 350N to the right.
 - d) 50N to the right.
15. What happens to the resultant vector when two vectors of equal magnitude act in opposite directions?
- a) It cancels out to zero
 - b) It doubles in magnitude
 - c) It becomes a scalar
 - d) It adds up to a larger vector