

Worksheet: Introduction to
Vectors and Angles

Name _____

1. Define scalar and vector quantities:

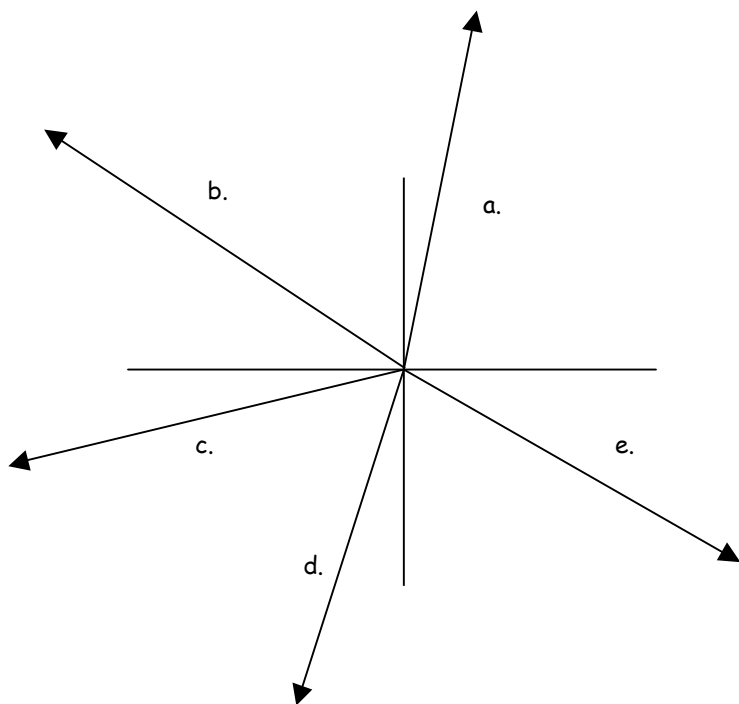
2. Which is a scalar and which is a vector?

- A weight of 50 N
- 20 seconds of time
- a mass of 10 kg
- the length of your pencil

- instructions on a treasure map
- the force of friction
- your age
- 5 m/s, West

3. In a vector, the length of the arrow represents the _____ of that quantity.

4. If you walk 5 blocks to school, then 5 blocks back home because you forgot your homework, then 5 blocks back to school, your distance traveled is _____, but your displacement is _____. This is because _____ (*distance, displacement*) is a quantity where direction does not matter (a _____ quantity, while _____ (*distance, displacement*) is a quantity where direction does matter (a _____ quantity).



5. Give the angle and direction of each vector.

- a. _____
- b. _____
- c. _____
- d. _____
- e. _____

6. Draw and label the following vectors:

- a. 12° W of N
- b. 31° E of N
- c. 25° S of E
- d. 43° N of E
- e. 8° S of W

