

Unit Vector Addition Worksheet

Name _____

Use the unit vector method of adding the following vectors:

1.) Add 35 N at 28°
 to 83 N at 76°

2.) Add 155 m at 15°
 to 93 m at 133°

3.) Two pool balls collide on a table if the first one has a momentum (a vector quantity) of 30 N-s at an angle of 43° and the second one has a momentum of 43 N-s at an angle of 63° . Find their combined momentum (add them).

4.) Find the combined force of to tackles on Emmet Smith during Monday night's football game, if the first tackle applies a force of 470 N at an angle of 73° and the second tackle applies a force of 735 N at an angle of 215°

5.) Add 23 m/s at 47°
 to 17 m/s at 318°