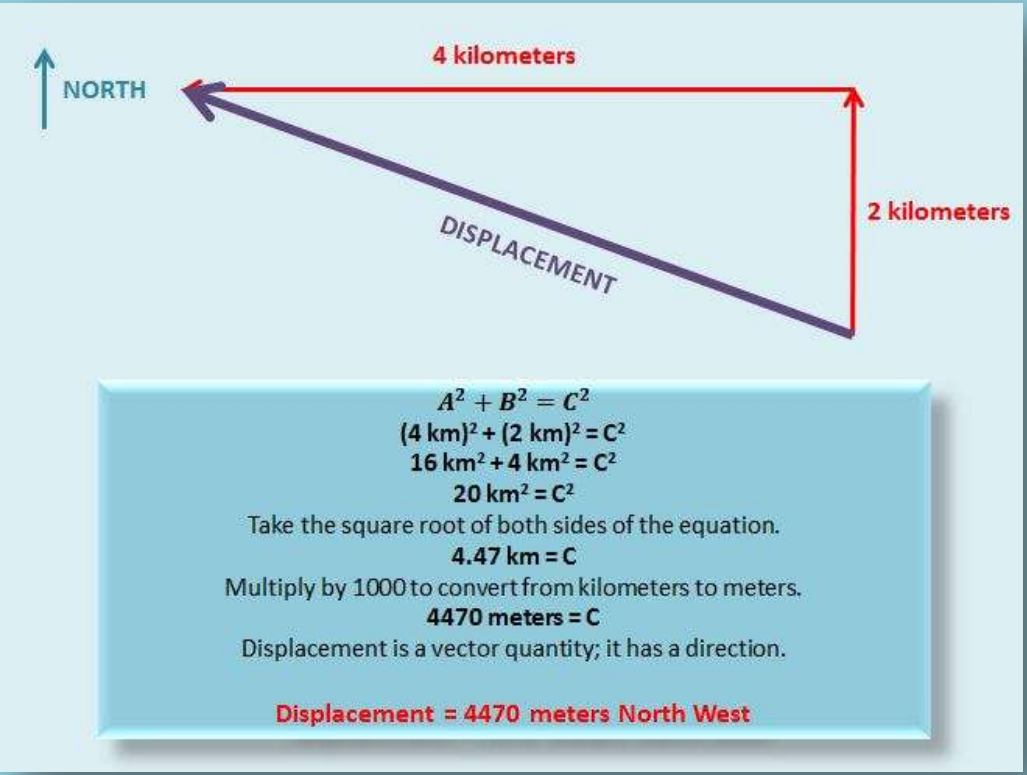
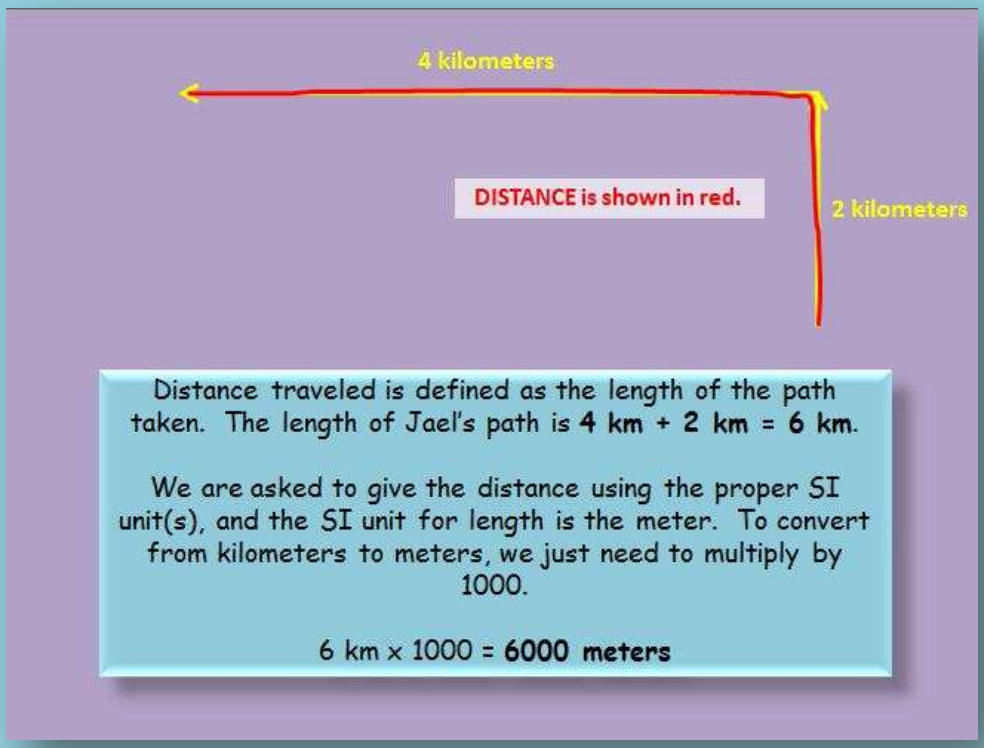
Distance and Displacement Quiz Solutions

Question	Solution and Point Break-Down
What is the **displacement** of Jael if she walks 2 km north and then turns and walks 4 km west. Please round your answer to two decimal places, and express your answer using the proper SI unit(s). Place the magnitude of your answer in the first blank, and the direction in the second blank. If there is no direction, type "none" in the second blank.	Correct number = .5 points Correct unit(s) = .5 points Correct direction = .5 points **Total = 1.5 points** 

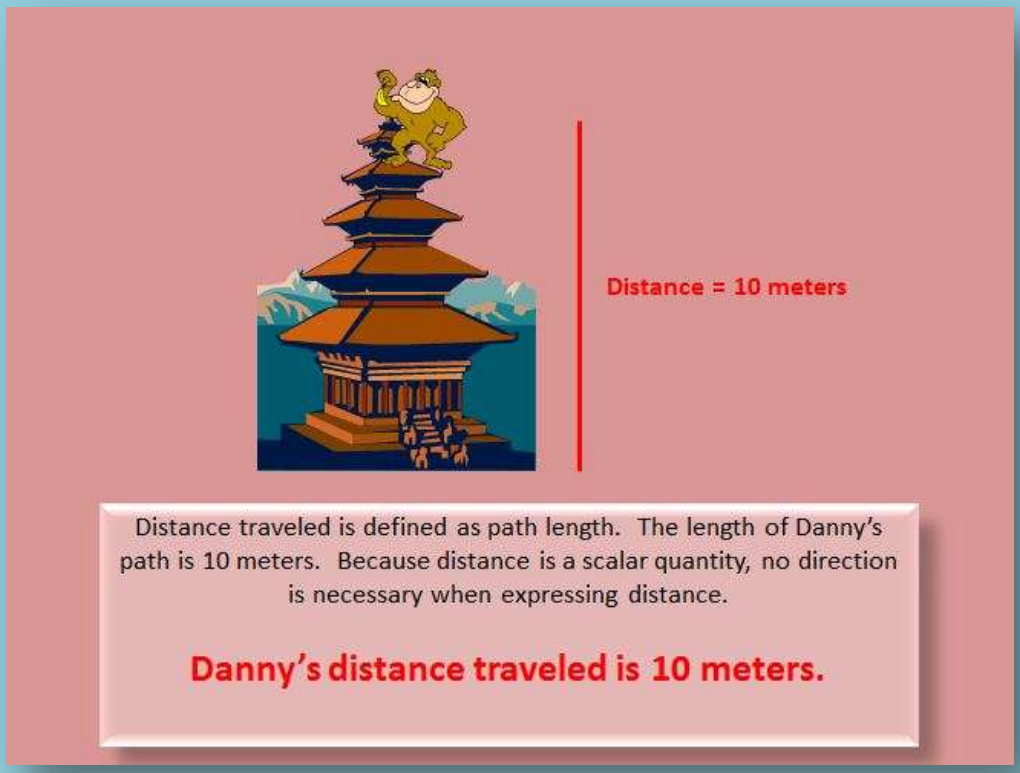
What is the **distance** traveled by Jael if she walks 2 km north and then turns and walks 4 km west.

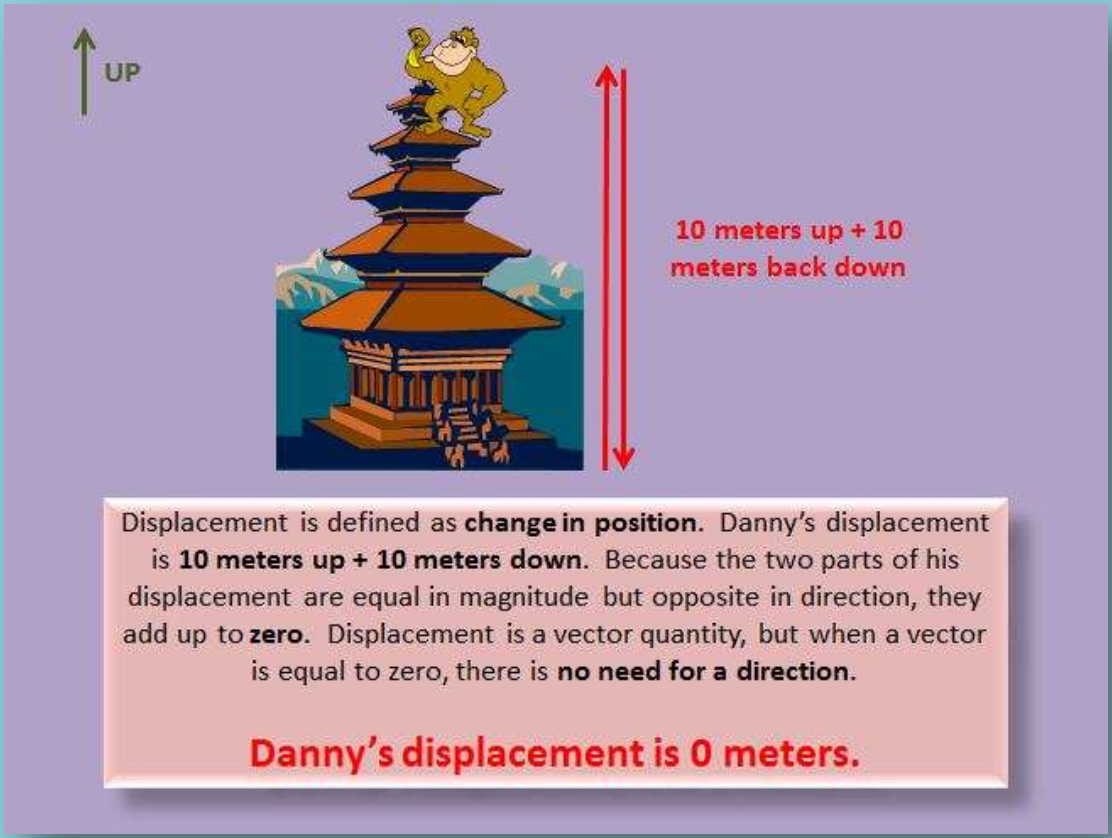
Please express your answer using the proper SI unit(s). Place the magnitude of your answer in the first blank, and the direction in the second blank. If there is no direction, type "none" in the second blank.

Correct number = .5 points
Correct unit(s) = .5 points
No direction = .5 points
Total = 1.5 points



What is the **displacement** of Danny if he climbs 10 meters up the side of a building? ***Assume the building's sides are vertical.*** Please express your answer using the proper SI unit(s). Place the magnitude of your answer in the first blank, and the direction in the second blank. If there is no direction, type "none" in the second blank.	Correct number = .5 points Correct unit(s) = .5 points Correct direction = .5 points **Total = 1.5 points** 

What is the distance traveled by Danny if he climbs 10 meters up the side of a building? Please express your answer using the proper SI unit(s). Place the magnitude of your answer in the first blank, and the direction in the second blank. If there is no direction, type "none" in the second blank.	Correct number = .5 points Correct unit(s) = .5 points No direction = .5 points **Total = 1.5 points** 

What is the **displacement** of Danny if he climbs 10 meters up the side of a building and repels back to the ground? Please express your answer using the proper SI unit(s). Place the magnitude of your answer in the first blank, and the direction in the second blank. If there is no direction, type "none" in the second blank.	Correct number = .5 points Correct unit(s) = .5 points Correct direction = .5 points **Total = 1.5 points** 

What is the **distance** traveled by Danny if he climbs 10 meters up the side of a building and repels back to the ground? Please express your answer using the proper SI unit(s). Place the magnitude of your answer in the first blank, and the direction in the second blank. If there is no direction, type "none" in the second blank.	Correct number = .5 points Correct unit(s) = .5 points No direction = .5 points **Total = 1.5 points**  **10 meters up + 10 meters back down = 20 meters** Distance traveled is defined as the **length of the path** taken. Danny traveled 10 meters up and then 10 meters back down. The length of his path is then **10 meters + 10 meters = 20 meters**. Distance is a scalar quantity. Thus, we do not need to include a direction. **Danny's distance traveled is 20 meters.**

What is the **displacement** of Jayce if he walks 2 km north, then turns and walks 5 km west, and finally walks 1 km south. Please round your answer to two decimal places, and express your answer using the proper SI unit(s). Place the magnitude of your answer in the first blank, and the direction in the second blank. If there is no direction, type "none" in the second blank.	Correct number = .5 points Correct unit(s) = .25 points Correct direction = .25 points **Total = 1.0 points**