**January 14th 2014**

1. The Earth orbits the sun at 66,500 MPH. How many meters does the Earth travel in one second? (1mile=1.609 kilometers)`
2. Vector A, with endpoint at the origin, has a magnitude of 5.3 and a direction of 50 degrees east to north. Vector B has a magnitude of 3.9 and a direction of 65 degrees north to east. What is the direction and magnitude of vector A+B (vector C).
3. A plane travelling 12,000 meters above the ground drops a bomb that is displaced a total of 13,000 meters before it hits the ground. What is the total distance the bomb travels horizontally? And in what direction does it fall?