VD unit 4 topic 1 part 1

Assume that the earth is perfect sphere, and the radius of the earth is 4000 miles. Calculate the linear velocity of a person perceived by an astronaut in space. Assume further that the person on earth is sitting on a bench in the following city. (Use your prior knowledge in Geometry class and the given latitude of the city to find the perceived linear velocity)

Austin, Texas. 30.25°	904.61mph	Key West, Florida. 24.5°	952.91 mph
Phoenix, Arizona. 33.5°	873.24 mph	Honolulu, Hawaii. 21.25°	976.00 mph
Portland, Oregon. 45.5°	733.99 mph	Sacramento, California. 38.5°	819.55 mph
Anchroage, Alaska. 61.25°	503.69 mph	Anaheim, California. 33.75°	870.71 mph