One car travels due east at 50 km/h, another car travels due north at 50 km/h. Are their velocities the same?

a. yes
b. no
c. sometimes

At an average speed of 15 km/hr, how far will a bicyclist travel in 4 ½ hours?

a. 3.33 km
b. 67.5 km
c. 63.75 km
d. 0.3 km

At an average speed of 11.8 km/hr, how far will a bicyclist travel in 175 minutes?

a. 2.92 km
b. 2065 km
c. 14.83 km
d. 34.4 km

SOLUTIONS

One car travels due east at 50 km/h, another car travels due north at 50 km/h. Are their velocities the same?

No, because velocity contains direction, and they are traveling in different directions. Their speed is the same.

At an average speed of 15 km/hr, how far will a bicyclist travel in 4 ½ hours?

67.5 km

speed = distance / time, so

distance = speed * time

distance = (15 km/hr) * (4.5 hr)

At an average speed of 11.8 km/hr, how far will a bicyclist travel in 175 minutes?

34.4 km

speed = distance / time, so

distance = speed * time

distance = (11.8 km/hr) * (175 min) (1 hr/ 60 min)