

SUPPOSE AT A CONCERT A SINGER'S VOICE IS RADIO BROADCAST ALL THE WAY AROUND THE WORLD BEFORE REACHING THE RADIO YOU HOLD TO YOUR EAR. THIS TAKES $1/8$ SECOND. IF YOU'RE CLOSE, YOU HEAR HER VOICE IN AIR BEFORE YOU HEAR IT FROM THE RADIO. BUT IF YOU ARE FAR ENOUGH AWAY, BOTH SIGNALS WILL REACH YOU AT THE SAME TIME. HOW MANY METERS DISTANT MUST YOU BE FOR THIS TO OCCUR?

