

Problem 1: While swimming in the wave pool, you observe that the water waves go up and down around five times per second and the crests are 3 meters apart. What is the wave speed?

Problem 2: As the ambulance goes near you, does the speed of the sound wave increase or decrease? Why?

Problem 3: Red light has the lowest frequency while violet light has the highest frequency. Which among these lights has the shortest and the longest wavelength?

Problem 4: We usually see the lightning appear before we hear the sound of thunder. Why?

Problem 5: Your friend says that gamma rays travel faster than radio waves. Is that correct? Explain your answer.