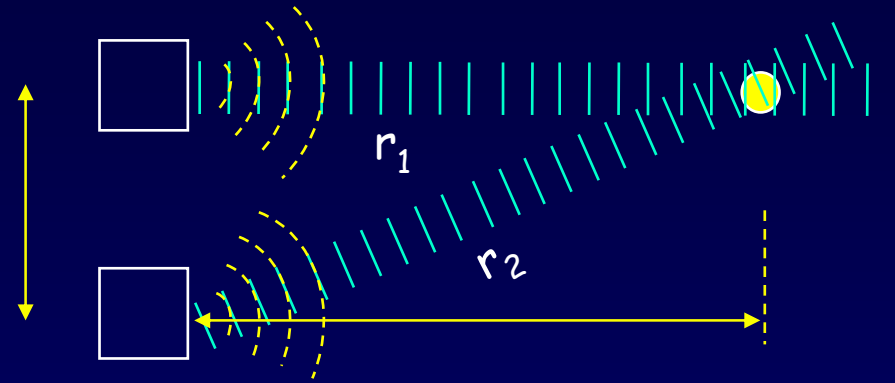


Solution



What happens to the intensity at the listener if we decrease the frequency f by a small amount?

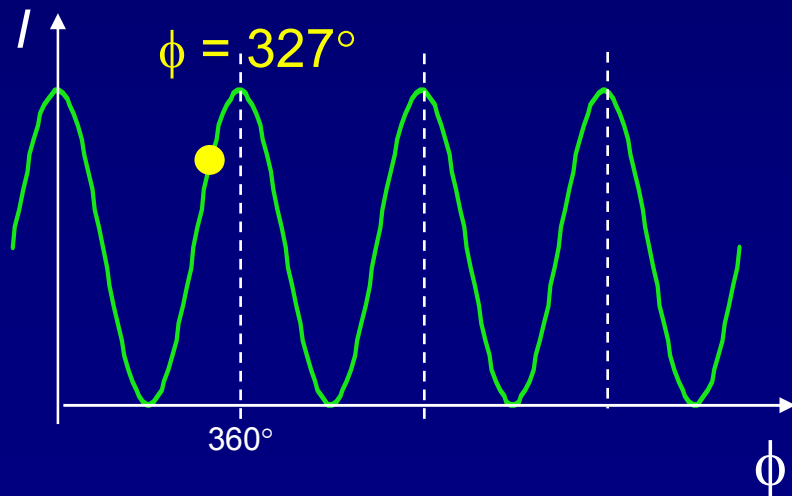
a. decrease

b. stay the same

c. increase

Hint: How does intensity vary with ϕ when $\phi = 327^\circ$?

Draw the graph of $I(\phi)$:



f decreases:

→ λ increases

→ δ/λ decreases

→ ϕ decreases

→ I decreases