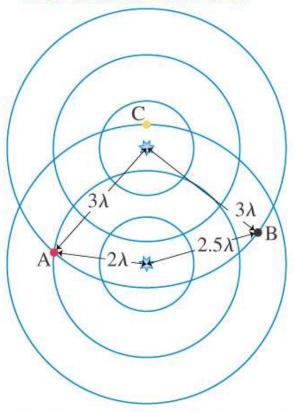
The interference at point C in the figure at the right is

- 1. maximum constructive.
- 2. destructive, but not perfect.
- 3. constructive, but less than maximum.
- 4. there is no interference at point C.
- 5. perfect destructive.

• At A, $\Delta r_A = \lambda$, so this is a point of constructive interference.



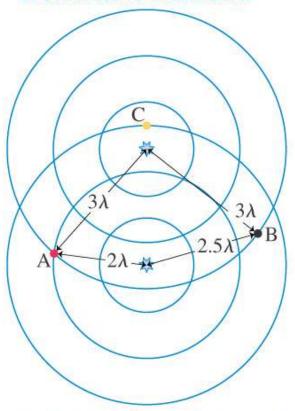
• At B, $\Delta r_{\rm B} = \frac{1}{2}\lambda$, so this is a point of destructive interference.

The interference at point C in the figure at the right is

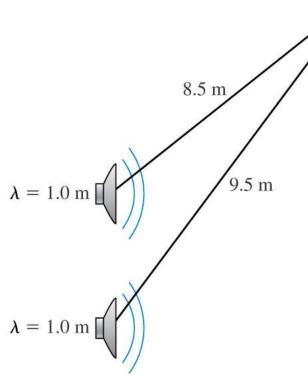
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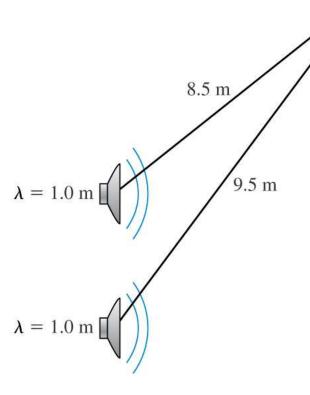


• At B, $\Delta r_{\rm B} = \frac{1}{2}\lambda$, so this is a point of destructive interference.



These two loudspeakers are in phase. They emit equal-amplitude sound waves with a wavelength of 1.0 m. At the point indicated, is the interference maximum constructive, perfect destructive or something in between?

- 1. maximum constructive
- 2. perfect destructive
- 3. something in between



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✓ 1. maximum constructive

- 2. perfect destructive
- 3. something in between