

Superposition (wave interference) Notes

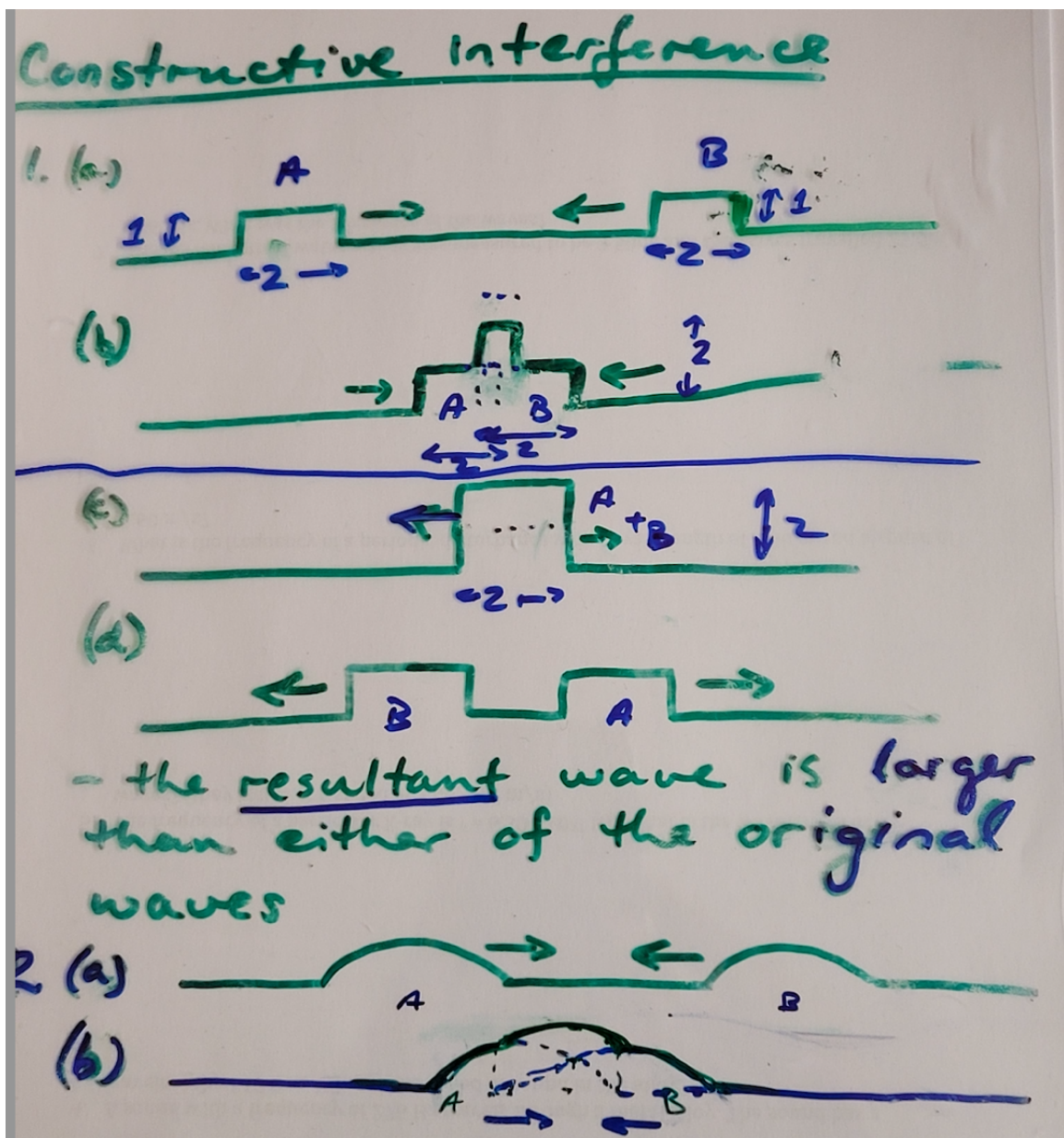
Constructive interference:

- Waves on the same side of the nodal line meet (i.e. 2 crests or two troughs)
- The resultant wave's amplitude is greater than the amplitude of the original waves

Destructive interference

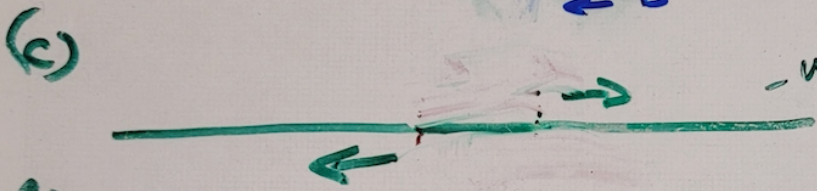
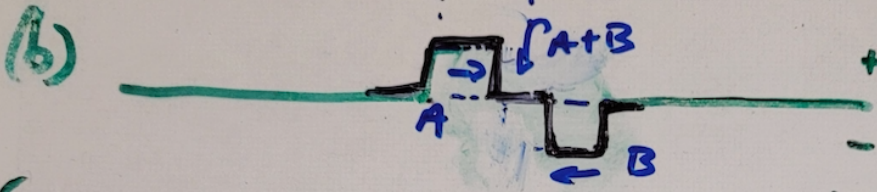
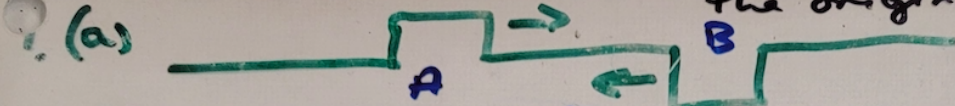
- Waves on opposite sides of the nodal line meet (i.e. 1 crest and 1 trough)
- The resultant wave's amplitude is smaller than the amplitude of the original waves

** Note: Wavelength is not change when wave interfere



DESTRUCTIVE INTERFERENCE

* resultant wave is smaller than the original?



- when they perfectly overlap
NODE

