

5 COMPARISON BETWEEN PROGRESSIVE AND STATIONARY WAVES

07 February 2021 19:23

(LEARN THE DIFFERENCES)

asked in exams so learn at least 3 of them.

Progressive wave

- Energy is transferred along the direction of propagation
- The wave profile moves in the direction of propagation
- Every point along the direction of propagation is *displaced* but at different instants
- Every point has the same amplitude
- Neighbouring points are not in phase

Stationary wave

- No energy is transferred along the direction of propagation
- The wave profile does not move in the direction of propagation
- There are points known as nodes where no displacement occurs
- Points between two successive nodes have different amplitudes
- All points between two successive nodes vibrate in phase with one other

