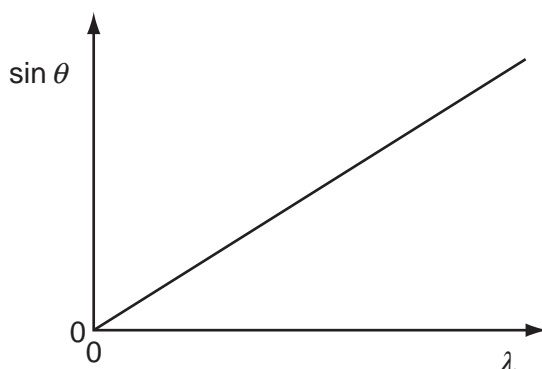


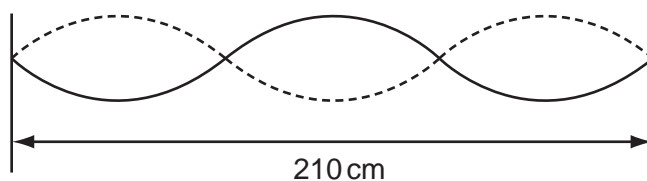
- 25** A diffraction grating with N lines per metre is used to deflect light of various wavelengths λ .

The diagram shows a relation between the deflection angles θ for different values of λ in the n^{th} order interference pattern.



What is the gradient of the graph?

- A** Nn **B** $\frac{N}{n}$ **C** $\frac{n}{N}$ **D** $\frac{1}{Nn}$
- 26** A stationary wave of frequency 80.0 Hz is set up on a stretched string of length 210 cm .



What is the speed of the waves that produce this stationary wave?

- A** 56.0 ms^{-1} **B** 112 ms^{-1} **C** 5600 ms^{-1} **D** $11\,200\text{ ms}^{-1}$

Space for working