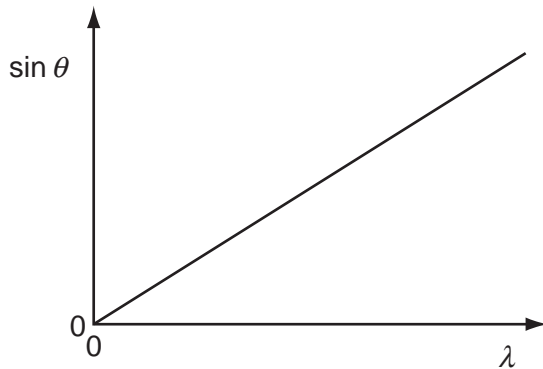


**25** A diffraction grating with  $N$  lines per metre is used to deflect light of various wavelengths  $\lambda$ .

The diagram shows a relation between the deflection angles  $\theta$  for different values of  $\lambda$  in the  $n^{\text{th}}$  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  $80.0 \text{ Hz}$  is set up on a stretched string of length  $210 \text{ cm}$