30 A beam of light of a single wavelength is incident normally on a diffraction grating.

The angle of diffraction θ is measured for each order of diffraction n. The distance between adjacent slits in the diffraction grating is d.

A graph is plotted to determine the wavelength of the light.

Which graph should be plotted and how is the wavelength determined from the graph?

	y-axis	x-axis	wavelength
A	n	$d \sin \theta$	gradient
B	n	$d \sin \theta$	1 / gradient
C	$\sin \theta$	d / n	gradient
D	$\sin \theta$	$d \times n$	1 / gradient