19 The diffraction pattern is formed when a single slit of width 0.60 mm is illuminated with monochromatic light of wavelength 550 nm**.** The width of the central maximum is *w* and the peak intensity is I_o.

The slit width is then doubled.

Given that the angle of diffraction is small, which row correctly shows the new width of the central maximum and the peak intensity?

	width of central maximum	peak intensity
A	½ *w*	2 I_o
B	½ *w*	4 I_o
C	2 *w*	½ I_o
D	2 *w*	¼ I_o