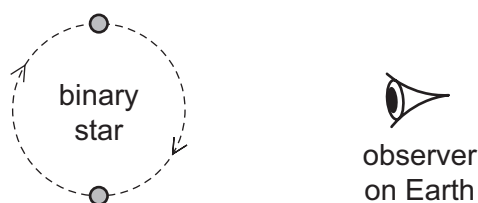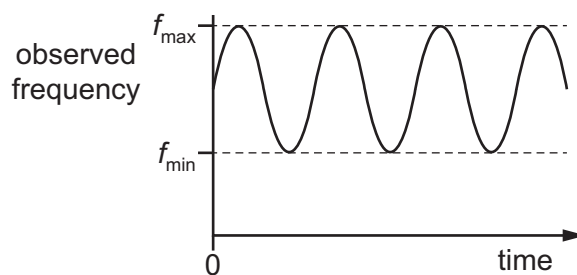24 A binary star consists of two stars rotating around a common centre. Light from one of the stars is observed on the Earth.

The observed frequency of the light varies between a minimum frequency f_{min} and a maximum frequency f_{max}, as shown.

The rate of rotation of the binary star increases.

What is the change to f_{max} and the change to f_{min}?

	f_{max}	f_{min}
A	decreases	decreases
B	decreases	increases
C	increases	decreases
D	increases	increases