Question	Answer	Mark	Mark scheme	Additional guidance
12 (a)	$f = \dfrac{224}{d^2}$	M1	for $3.5 = \dfrac{k}{8^2}$ oe ($k = 224$)	Accept use of $\propto$ for the M mark
		A1	for $f = \dfrac{224}{d^2}$ oe	
(b)	4.73	M1	for $10 = \dfrac{"224"}{d^2}$ or $d^2 = "224" \div 10$ **or** ft their value for k provided $f = \dfrac{k}{d^2}$ is used	
		A1	for answer in range 4.73 to 4.733	