

**Q2. A nearsighted person cannot clearly see beyond 200cm.  
Find the power of the lens needed to see objects at large distance?**

Solution:

For near sighted person, formula is

$$\Rightarrow \frac{1}{v} - \frac{1}{u} = \frac{1}{f}$$

$$\Rightarrow \frac{1}{-2} - \frac{1}{\text{infinity}} = \frac{1}{f}$$

$$f = -2$$

$$\text{Power } P = 1/f = -0.5\text{D}$$