## Answer on Question \#43371- Physics-Optics

Find the effective power of the combination of two lenses in contact having powers (1) +5D and +3D (2) +5D and -3D

## Solution

The effective power of the combination of two lenses in contact having powers $D_{1}$ and $D_{2}$ is

$$
D_{e f f}=D_{1}+D_{2} .
$$

(1) $D_{\text {eff }}=+5 \mathrm{D}+(+3 \mathrm{D})=+8 \mathrm{D}$.
(2) $D_{\text {eff }}=+5 \mathrm{D}+(-3 \mathrm{D})=+2 \mathrm{D}$.

Answer: (1) +8D; (2) +2D.

