

**Answer on Question 38198, Physics, Options** Formula for magnification is

$$M = \frac{f}{f - d_o}$$

where  $f$  is focal length and  $d_o$  is the distance from the lens to the object. So we can find

$$d_o = f - \frac{f}{M} = 20 - 20/2 = 10 \text{ cm}$$

The answer is 10 cm.