

Variation

3. Suppose y varies directly as x . If $y = 6$ when $x = 30$, find y when $x = 120$.

4. The intensity (I) of light varies inversely as the square of the distance (d) from the light source.
 - (a) If $I = 4$ when $d = 3$, what is d when $I = 7$?

 - (b) If a person doubles her/his distance from a lamp, what happens to the intensity of the light at her new location?