

## 11.4 Indirect Variation

3)

- a) Variation Constant = 120
- b) Independent Variable = Weight
- c) Dependent Variable = Distance

5)  $R = \frac{V}{I}$        $R = \text{resistance}, I = \text{amperage}, V = \text{variation constant}$

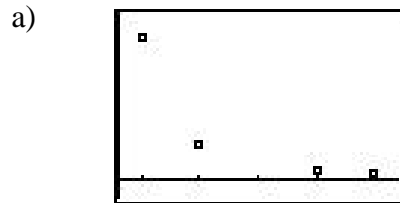
7) 20 ohms

9)  $a = 5000 \text{ N m}^2$

11)  $a = 200$        $D = \frac{200}{V}$

13)  $a = 192$        $y = \frac{192}{x^3}$

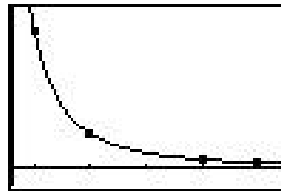
15)



b) Yes

c)  $y = 53.2x^{-2} = \frac{53.2}{x^2}$

d) Yes



e) The greater the distance one moves away from the lamp, the less amount of light is seen.

17)  $x = 0$  or  $x = 3$

19)

a)  $3\sqrt{5}$

b)  $7\sqrt{3}$