

b) y.

$$\frac{SZ}{Sy} = (x+1)^{\frac{1}{2}} \cdot \frac{2y}{y^2+1}$$
$$= \frac{2y\sqrt{x+1}}{y^2+1}$$

[24] The demand functions for two products are given by:-

$$q_1 = 900 - 9p_1 + 2p_2$$

$$q_2 = 1200 + 6p_1 - 10p_2$$

Find the demands q_1 and q_2 if $p_1 = 10\$$ and $p_2 = 12\$$.

$$\rightarrow q_1 = 900 - 9(10) + 2(12)$$
$$= 834$$

$$\rightarrow q_2 = 1200 + 6(10) - 10(12)$$
$$= 1140$$