

Marginal rate of substitution, $mrs(x, y)$

\bar{r}

Consumer Surplus

$$CS = \frac{1}{2}(\bar{r} - p)x$$

i

Market price, p

$$mrs(x, y) = \bar{r} - \left(\frac{\bar{r}}{\bar{x}}\right)x$$

x^*

\bar{x}

Quantity of the good, x

