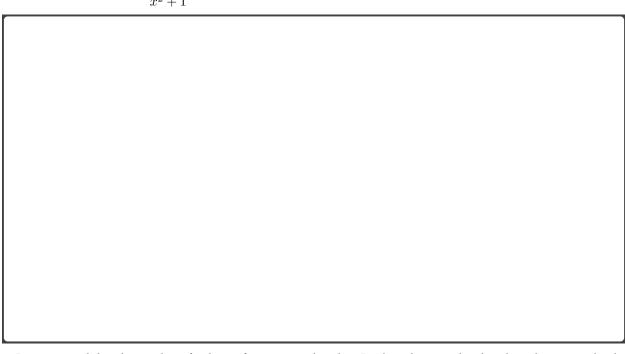
Lecture 15 Worksheet (ECON211), AY 2025-26 [Date: 26 Aug 2025]

| 1. 1 | If $y = log_a x$ and $a^y = x$, | find the first and the | e second order deri | vatives. | | |
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| 2. N wh | . Myntra estimates the demarken a) the unit price falls be | and for a particular a elow ₹5, and b) the v | apparel brand to be unit price goes abov | $q = (100-p^2)$. Where ₹7? What about the | at will be the elasticity of den e revenue in each of these ca | nan |
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| 2 P: 1 f/(-1)/1) :f f/ | e^{-3x} |
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| 3. Find $f'^{(-1)}(1)$ if $f(x) =$ | $\overline{x^2+1}$ |



4. It is estimated that the number of tickets q for a concert listed on Bookmyshow is related to the ticket price p by the following equation: $q = \frac{2}{3}\sqrt{36-p^2}$ (0 ≤ p ≤ 6). The price is set to ₹2 per ticket. Is the demand elastic or inelastic at this price? What happens to the revenue if Bookmyshow decides to increase the ticket price?