

Remember: questions regarding this paper to number 8 points will be asked

8. **Transfer Algebra (questions have total 10 points)**

10) $\frac{1}{x^2} = x^{-2}$ $\frac{d}{dx} x^{-2} = -2x^{-3} = -\frac{2}{x^3}$

11) $\frac{d}{dx} x^2 = 2x$

12) $\frac{d}{dx} \ln(x) = \frac{1}{x}$ $\frac{d}{dx} e^x = e^x$

9. **Use the same transfer algebra (no questions)**

1) $\frac{d}{dx} \ln(x) = \frac{1}{x}$ $\frac{d}{dx} e^x = e^x$

2) $\frac{d}{dx} x^2 = 2x$

3) $\frac{d}{dx} x^3 = 3x^2$ $\frac{d}{dx} x^4 = 4x^3$

4) $\frac{d}{dx} x^5 = 5x^4$ $\frac{d}{dx} x^6 = 6x^5$

5) $\frac{d}{dx} x^7 = 7x^6$ $\frac{d}{dx} x^8 = 8x^7$

6) $\frac{d}{dx} x^9 = 9x^8$ $\frac{d}{dx} x^{10} = 10x^9$

7) $\frac{d}{dx} x^{11} = 11x^{10}$ $\frac{d}{dx} x^{12} = 12x^{11}$

8) $\frac{d}{dx} x^{13} = 13x^{12}$ $\frac{d}{dx} x^{14} = 14x^{13}$

9) $\frac{d}{dx} x^{15} = 15x^{14}$ $\frac{d}{dx} x^{16} = 16x^{15}$

10) $\frac{d}{dx} x^{17} = 17x^{16}$ $\frac{d}{dx} x^{18} = 18x^{17}$

10. **Transfer the answers using the same transfer algebra (no questions)**

1) $\frac{d}{dx} \ln(x) = \frac{1}{x}$ $\frac{d}{dx} e^x = e^x$

11. **Use the same transfer algebra (no questions)**