⑩

| Name: | | I.D. | | | | |

1. The consumation function $C=(0.6I^2)/(I+1)+1.31$, find the margenal propensity to consume?

$$\frac{dC}{dI} = \frac{1.2I(I+1) - 0.6I^2(1)}{(I+1)^2}$$

$$\left\{ \quad C = \frac{0.6I^2}{(I+1)} + 1.31 \right.$$

$$= \frac{1.2I^2 + 1.2 - 0.6I^2}{(I+1)^2}$$

$$= \frac{0.6I^2 + 1.2}{(I+1)^2}$$

2. Find y' if $y = 4x^3\sqrt{1-x^2}$

$$y' = 12x^2\sqrt{1-x^2} + 4x^3 \frac{1}{2\sqrt{1-x^2}} \cdot -2x$$

$$= 12x^2\sqrt{1-x^2} - \frac{4x^4}{\sqrt{1-x^2}}$$

3. Find derivative of $y = 6\ln\sqrt[3]{x}$

$$y = 6\ln x^{\frac{1}{3}}$$

$$= 2\ln x$$

$$y' = \frac{2}{x}$$