

$$1a) f(x) = 5x^4 + 8x^3 + 1$$

$$\rightarrow F(x) = 1x^5 + 2x^4 + x$$

$$b) f(x) = \frac{x^6 + 1}{x^2} = \frac{x^6}{x^2} + \frac{1}{x^2} = (x^6 \cdot x^{-2}) + (1 \cdot x^{-2})$$

$$= x^4 + x^{-2}$$

$$\rightarrow F(x) = \frac{1}{5}x^5 - x^{-1}$$