4)

1) $\int (x^7 - 4x^3 - 5x + 9) dx$

$\int x^7 dx = \int 4x^3 dx - \int 5x \cdot dx \int 9 dx$

$\int x^7 dx = x^8/8$

$\int 4x^3 dx = x^4$

$\int 5x \, dx = 5x^2/2$

$\int 9 dx = 9x$

$x^8/8 - x^4 - 5x^2/2 - 9x + c$

$$B = \int \frac{x^3 - 7x^2 + x}{x^2} \, dx$$

$$x^3 - 7x^2 + x \qquad\qquad 1 - \frac{7}{x} + \frac{1}{x^2}$$

$$\int 1 - \frac{7}{x} + 1/x^2 \, dx = \int 1 \, dx - \int \frac{7}{x} \, dx + \int 1/x^2 \, dx$$

$$\int 1 \, dx = x$$

$$\int \frac{7}{x} \, dx = 7 \, \ln |x| = x$$

$$\int 1/x^2 \, dx = 1/x$$

$$x - 7 \ln |x| - 1/x$$

$$x - 7 \ln |x| - \frac{1}{x} + c$$