

$$a) \int x^5 - 9x^2 + \sqrt{x} + 1 \, dx = \frac{x^6}{6} - \frac{9x^3}{3} + \frac{x^{3/2}}{3/2} + x + C$$

$$= \frac{x^6}{6} - 3x^3 + \frac{2}{3}x^{3/2} + x + C$$

$$b) \int \cos x - 2\sin x + \frac{2}{\sqrt{5}}e^x \, dx = \sin x + 2\cos x + \frac{2}{\sqrt{5}}e^x + C$$