Section 5-1 : Indefinite Integrals

1. Evaluate each of the following indefinite integrals.
   (a) $\int 6x^5 - 18x^2 + 7\,dx$
   (b) $\int 6x^5\,dx - 18x^2 + 7$

2. Evaluate each of the following indefinite integrals.
   (a) $\int 40x^3 + 12x^2 - 9x + 14\,dx$
   (b) $\int 40x^3 + 12x^2 - 9x\,dx + 14$
   (c) $\int 40x^3 + 12x^2\,dx - 9x + 14$

For problems 3 – 5 evaluate the indefinite integral.

3. $\int 12t^7 - t^2 - t + 3\,dt$

4. $\int 10w^4 + 9w^3 + 7w\,\,dw$

5. $\int z^6 + 4z^4 - z^2\,dz$

6. Determine $f(x)$ given that $f'(x) = 6x^8 - 20x^4 + x^2 + 9$.

7. Determine $h(t)$ given that $h'(t) = t^4 - t^3 + t^2 + t - 1$.