CALCULUS WORKSHEET

Answer the following integrals:

1.
$$\int (x^4 - x^3 + x^2) dx$$

2.
$$\int (5t^8 - 2t + t + 3)dt$$

$$3. \int \frac{3}{x} dx$$

4.
$$\int (2\sin\theta + 3\cos\theta)d\theta$$

$$5. \int (5e^x - e) dx$$

Answer Sheet:

1.
$$\frac{1}{5}x^5 - \frac{1}{4}x^4 + \frac{1}{3}x^3 + C$$

2.
$$\frac{5}{9}t^9 - \frac{2}{5}t^5 + \frac{1}{2}t^2 + 3t + C$$

3.
$$3 \ln |x| + C$$

4.
$$-2\cos\theta + 3\sin\theta + C$$

5.
$$5e^x - ex + C$$