

1.  $50/3$

2.  $-\frac{t^2}{2} + 4t + 1$

3.  $-\frac{4}{5x} - \frac{2\sqrt{x}}{3} + 2x - \frac{9x^{4/3}}{2} + C$

4.  $\frac{3x^{10/3}}{5} - \frac{30x^{11/6}}{11} + \frac{42x^{5/6}}{5} + C$

5.  $\frac{2}{3} \sec(3\theta) + C$

6.  $\frac{7}{3} - \frac{98\sqrt{14}}{81}$

7.  $-\frac{3}{8} \left(-\frac{1}{\sqrt{2}}\right)^8 + \frac{3}{8} \left(\frac{\sqrt{3}}{2}\right)^8 = \frac{195}{2048}$

8.  $-\cos x \sqrt{\sin^2 x - \sin x + 2}$

9. i) 19   ii) -27   iii) 92   iv) 4