

## U-Sub Packet

II. 1)  $\frac{(1+2x)^5}{5} + C$

2)  $\frac{1}{15}(x^3-1)^5 + C$

3)  $\frac{-15(1-x^2)^{4/3}}{8} + C$

4)  $\frac{-1}{3(1+x^3)} + C$

5)  $-4\sqrt{16-x^2} + C$

6)  $\frac{-1}{2(x^2+2x-3)} + C$

7)  $\frac{-(1+\frac{1}{x})^4}{4} + C$

8)  $\sqrt{2x} + C$

III. 1)  $\frac{-\cos(2x)}{2} + C$

2)  $\frac{1}{2}\sin(x^2) + C$

3)  $\frac{-\cos^2(2x)}{4} + C$

OR

$\frac{\sin^2(2x)}{4} + C$

4)  $\frac{-\cos(x^2)}{2} + C$

5)  $\frac{\sin(6x)}{6} + C$

6)  $\frac{\tan^5 x}{5} + C$

7)  $\frac{\tan^2 x}{2} + C$

OR

$\frac{\sec^2(x)}{2} + C$

8)  $-\cot x - x + C$

(no u-sub needed... just the identity  $1 + \cot^2 x = \csc^2 x$ )

9)  $-2\cot(\frac{x}{2}) + C$