

Names: \_\_\_\_\_

Group #: \_\_\_\_\_

Evaluate the following indefinite integrals. ***If substitution is used, be sure to clearly indicate  $u$  and  $du$ .*** (Remember: You can check your answer by differentiating.)

1. 
$$\int (2x + 1)\sqrt[5]{x^2 + x} dx$$

2. 
$$\int \frac{x}{x^2 + 1} dx$$

3. 
$$\int x\sqrt{3 - x} dx$$

4. 
$$\int (3x^2 + 4x - 5) \cdot 8^{(x^3 + 2x^2 - 5x + 5)} dx$$

$$5. \int \frac{\sin(\sqrt{x})}{\sqrt{x}} dx$$

$$6. \int \frac{e^x}{(1 - e^x)^3} dx$$

$$7. \int \frac{x}{\sqrt{x+1}} dx$$

$$8. \int \frac{1}{(1+x)\sqrt{x}} dx$$