Instructions: You may not use notes, books or calculators on this assessment. No partial credit. **Don’t simplify answers.** Successful completion of this assessment is 8 of 10 completely correct. Good Luck!

1. Find $\int 2x^3 - 5x + 12 \, dx$

2. Find $\int (\cos x - e^x) \, dx$

3. Find $\int \left( \frac{1}{x} - \sin x \right) \, dx$

4. Find $\int \sec^2 x \, dx$

5. Find $\int (2x^3 + x) \, dx$

6. Find $\int \left( \frac{1}{x} - 2 \right) \, dx$

7. Find $\frac{d}{dx} \left( x \right)$

8. Find $r(y)$ if $r'(y) = \sqrt{y} + 2$

9. Find $g(t)$ if $g'(t) = \cos t$ and $g(0) = 5$

10. Find $h(w)$ if $\frac{dh}{dw} = e^w$ and $h(\pi) = 2$