

## MAC 2312 Calculus II, Worksheet #6

Date: \_\_\_\_\_

Name: \_\_\_\_\_

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Q1) Solve  $\int x^3 \sqrt{1-x^2} dx$

Q2) Solve  $\int \frac{t^5}{\sqrt{t^2+2}} dt$

Q3) Solve  $\int \frac{\sqrt{x^2-9}}{x^3} dx$

Q4) Solve  $\int \frac{dt}{\sqrt{t^2-6t+9}}$

Q5) Evaluate the integral  $\int \frac{5x+1}{(2x+1)(x-1)} dx$

Q6) Evaluate the integral  $\int \frac{x^3-2x^2-4}{x^3-2x^2} dx$

Q7) Evaluate the integral  $\int \frac{4x}{x^3+x^2+x+1} dx$

Q8) Evaluate the integral  $\int_0^1 \frac{x}{x^2+4x+13} dx$