

Each problem is worth 5 points. Clear and complete justification is required for full credit.

1. Find the most general antiderivative of the function  $f(x) = \frac{10}{x^9}$ .

$$\int f(x) dx$$

$$\int 10 x^{-9} dx$$

$$10 \int x^{-9} dx$$

$$10 \left( \frac{x^{-8}}{-8} \right) + C$$

$$\frac{-5}{4x^8} + C$$

Good!

Nice!



$$\frac{-5}{4} x^{-8}$$

$$\frac{40}{4} x^{-9}$$

$$10 x^{-9}$$