

## ANTIDERIVATIVE PROBLEMS

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**Exercise.** (Problem A) Suppose  $f'' = 12x^2 + 6x - 4$  and  $f(0) = 4$  and  $f(1) = 1$ . Find  $f$ .

**Exercise.** (Problem B) Find the most general antiderivative of  $4 \sin x + \frac{2x^5+1}{x}$ .

**Exercise.** (Problem C) Find  $f(x)$  such that  $f'(x) = \cos x$ .

**Exercise.** (Problem D) Is  $x^2 + 3x - 2$  an antiderivative of  $2x - 3$ ?