Integral quiz more practice:

Find/evaluate the integrals. Show all of your work (use calculus). If the integral cannot be evaluated by the usual methods, explain why.

$$1. \int_1^4 x \sqrt{x} - \frac{3}{x^3} dx$$

2.
$$\int (x+5)(2x-1) dx$$

$$3. \int \cot^3 x \csc^2 x \ dx$$

$$4. \int x \sin(x^2) \, dx$$

$$5. \int_0^1 9x \sqrt{3x + 1} dx$$

6.
$$\int_{-2}^{2} \frac{x}{(x+1)^2} dx$$