No notes or calculators. Show all work.

Find the antiderivatives.

1. (3 points) $\int 6x(3x - x^3)\, dx$

2. (3 points) $\int 6x^{2/3} - 8x^{4/5}\, dx$

Find the antiderivative by using u-substitution.

3. (4 points) $\int \frac{1}{5-6x}\, dx$