AP Calculus AB   Name_____
U-Substitution and the Reverse Chain Rule   Date_____

Evaluate each indefinite integral.

1) $\displaystyle \int (3x-5)^{-4} \cdot 3x \, dx$

2) $\displaystyle \int x \sqrt[3]{5x+4} \, dx$

3) $\displaystyle \int x \sqrt[3]{2x+3} \, dx$

4) $\displaystyle \int (x-5)^5 \cdot 3x \, dx$

5) $\int 20\sin -4x \cdot (\cos -4x)^{\frac{1}{2}}\ dx$

6) $\int 10e^{5x} \cdot \left(e^{5x} - 4\right)^{-3}\ dx$

7) $\int \dfrac{6e^{3x}}{\left(e^{3x} + 5\right)^4}\ dx$

8) $\int \dfrac{2(-4 + \ln -x)^{-5}}{x}\ dx$