

Name: _____ Score: _____

Teacher: _____ Date: _____

More Integration by substitution

Evaluate each of the following integrals

1. $\int 4\sqrt{5+9x} + 12(5+9x)^7 dx$

2. $\int 7t^3 \cos(2+t^4) - 8t^3 e^{2+t^4} dt$

3. $\int \frac{6e^{7w}}{(1-8e^{7w})^3} + \frac{14e^{7w}}{1-8e^{7w}} dw$

4. $\int x^4 - 7x^5 \cos(2x^6+3) dx$

5. $\int e^z + \frac{4 \sin(8z)}{1+9 \cos(8z)} dz$

6. $\int 20e^{2-8w} \sqrt{1+e^{2-8w}} + 7w^3 - 6\sqrt[3]{w} dw$

7. $\int (4+7x)^3 - 9x\sqrt[4]{5x^2+3} dx$

8. $\int \frac{6x-x^2}{x^3-9x^2+8} - \csc^2\left(\frac{3x}{2}\right) dx$