## **Integration Review Problems - Using Tables**

$$1) \quad \int x^2 \sqrt{x^2 - 7} \, dx$$

Formula (# in your book): 40, u = x,  $a = \sqrt{7}$ 

$$2) \int \frac{\sqrt{5-3x}}{7x} dx$$

Formula (# in your book): 58, u = x, a = 5, b = -3

3) 
$$\int \frac{2}{x(2x^4-7)^2} dx$$

Formula (# in your book): 52,  $u = x^4$ , a = -7, b = 2

4) 
$$\int \frac{2 x^9}{(3-5 x^5)^2} dx$$

Formula (# in your book): 51,  $u = x^5$ , a = 3, b = -5

$$5) \int \frac{x^5}{\sqrt{3+x^3}} \, dx$$

Formula (# in your book): 55,  $u = x^3$ , a = 3, b = 1

6) 
$$\int \frac{1}{x\sqrt{1-x^6}} \, \mathrm{d}x$$

Formula (# in your book): 35,  $u = x^3$ , a = 1 OR #51,  $u = x^6$ , a = 1, b = -1

7) 
$$\int \frac{1}{e^x \sqrt{5 + e^2 x}} \, \mathrm{d}x$$

Formula (# in your book): 28,  $u = e^x$ ,  $a = \sqrt{5}$ 

8) 
$$\int \frac{1}{\tan x \sqrt{1 + \sin^2 x}} \, dx$$

Formula (# in your book): 27,  $u = \sin x$ , a = 1 (this one is tricky...)