

Name: _____

Band: _____

Calculus | Packer Collegiate Institute | 2008-2009

ANTI-derivative Matching

Antiderivative:

<u>Function</u> : $f(x)$	<u>Antiderivative of Function</u> : $F(x)$
_____ 1. $3x^2$	A. $\frac{1}{3}x^3 + x^2 + x$
_____ 2. $-\sin(x)$	B. x^{-1}
_____ 3. $\sin(x)$	C. $2e^{x/2}$
_____ 4. e^x	D. $\frac{2}{3}x^{3/2}$
_____ 5. $12x^3$	E. $-\cos(x)$
_____ 6. $\frac{1}{x^2}$	F. $\sin^3(x)$
_____ 7. $e^{x/2}$	G. $\frac{1}{2}e^{2x}$
_____ 8. $\frac{x^3}{3}$	H. $3x$
_____ 9. $-x^{-2}$	I. $\frac{1}{12}x^4$
_____ 10. e^{2x}	J. x^3
_____ 11. $3\sin^2(x)\cos(x)$	K. $\cos(x)$
_____ 12. 3	L. e^x
_____ 13. $(x+1)^2$	M. $-\cos^3(x)$
_____ 14. $3\cos^2(x)\sin(x)$	N. $-\frac{1}{x}$
_____ 15. $\sqrt{x}$	O. $3x^4$