

**AB Calculus**  
No Calculator

**INTEGRATION REVIEW #3**  
Integration by Parts

1. $\int x \ln x \, dx$	11. $\int \cos x \ln(\sin x) \, dx$
2. $\int x \sec^2 x \, dx$	12. $\int \frac{\ln x}{x^2} \, dx$
3. $\int x \cos 5x \, dx$	13. $\int (x\sqrt{x+3}) \, dx$
4. $\int (\ln x)^2 \, dx$	14. $\int \sin^2 x \, dx$
5. $\int x e^{-x} \, dx$	15. $\int \frac{x}{e^x} \, dx$
6. $\int \sin^{-1} x \, dx$	16. $\int e^x \sin x \, dx$
7. $\int x \sin(3x) \, dx$	17. $\int x^2 \sin x \, dx$
8. omit	18. $\int \ln x \, dx$
9. $\int \cos(\ln x) \, dx$	19. $\int x e^{5x} \, dx$
10. $\int x^3 e^x \, dx$	20. $\int x^2 e^{5x} \, dx$