

3-4 Sigma and Factorial Notation

Name _____

Evaluate each below. Don't use the factorial button on your calculator.

_____ 1. $\sum_{n=1}^3 5n$

_____ 2. $\sum_{n=1}^3 (n+3)$

_____ 3. $\sum_{n=4}^6 (n-10)$

_____ 4. $\sum_{x=5}^8 x^2$

_____ 5. $\sum_{b=-4}^{-1} (2b-1)$

_____ 6. $\sum_{n=1}^4 2^n$

_____ 7. $\sum_{n=11}^{13} (-3n+25)$

_____ 8. $\sum_{n=0}^3 (n-2)^2$

_____ 9. $\sum_{x=1}^3 x^x$

_____ 10. $\frac{8!}{6!}$

_____ 11. $\frac{28!}{27!}$

_____ 12. $\frac{6!}{2!4!}$

_____ 13. $\frac{10!}{7!}$

_____ 14. $\frac{8!7!}{6!5!}$

_____ 15. $\frac{100!}{98!2!}$