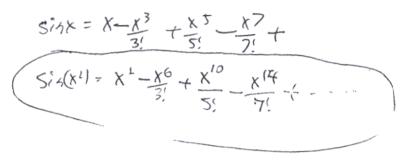
13. What infinite power series is equal to  $f(x) = \sin(x^2)$  about a = 0? (A different way to phrase the same problem is, "Find the Taylor series for  $f(x) = \sin(x^2)$  about a = 0".)







14. Find a closed formula for  $\sum_{k=3}^{75} 3^k = 3^3 + 3^4 + 3^5 + 3^6 + \dots + 3^{75}$ . (Your answer should not have any summation signs and should not have any dots.)

$$547 - 3 \quad 547 = 3^{3} - 3^{76}$$

$$547 = 3^{3} - 3^{76}$$

$$1 - 3$$

