8 **Chapter Review**

A Lot of Lotto?

A local charity is holding a penny lottery to raise money. Work through the problems below to find out how much the charity raised.

_____ **1.** $(3x^4)(6x^3)$

_____ **2.** Divide the answer to Exercise 1 by $9x^6$.

_____ **3.** Multiply the answer to Exercise 2 by $x^2 - 3x - 1$.

_____ **4.** Add $6x^2 + 4x$ to the answer to Exercise 3.

_____ **5.** Subtract $2x^3 + x - 5$ from your answer to Exercise 4.

_____ **6.** Multiply your answer from Exercise 5 by $x + 6$.

_____ **7.** Substitute $x = 20$ into your answer to Exercise 6. Write the result in scientific notation.

_____ **8.** Multiply your answer from Exercise 7 by 3.8×10^3. Write the result in scientific notation.

Write the final answer in standard form. _____ pennies

How many dollars did the fund-raiser generate? _____

Answers are located in the Answer Key.