1. (5 points) Soon after compact disc technology was introduced, CD sales grew exponentially. The number of CDs purchased during the year, \( t \) years after 1985, is given by

\[ N(t) = 7.5 \cdot 6^{0.5t}, \]

where \( N(t) \) is in millions of CDs. (So, \( t = 0 \) corresponds with the year 1985.)

(a) According to this model, how many CDs were purchased in 1990?

(b) Rewrite the formula \( N(t) = 7.5 \cdot 6^{0.5t} \) as an exponential function in standard form \( N(t) = A_0 \cdot b^t \).
2. Sketch the graph of \( y = -2 \cdot 3^{x+4} \). Clearly label at least 3 points on your graph. Can you include the \( y \)-intercept on your graph?