Calculus Exercises (7.4)

1. Find the length of the curve \( y = 1 + 6x^{\frac{3}{2}} \), \( 0 \leq x \leq 1 \)

2. Find the arc length function for the curve \( y = 2x^{\frac{3}{2}} \) with starting point \( P_0(1, \frac{7}{12}) \).

3. Set up an integral for the length of the curve \( y = x^3 \), \( 1 \leq x \leq 2 \).