

$$N 105211 =$$

$$= 1.276 + 117.300$$

$$+ 221.0 \left[ \frac{5/6}{x^{5/6}} \right]_{150}^{221.0} +$$

$$3.677 \left[ \frac{2/3}{x^{2/3}} \right]_{150}^{221.0} +$$

$$+ 4992 \int_{150}^{221.0} \frac{1}{x^{4/3}} dx$$

$$= 6083 \int_{150}^{221.0} \frac{1}{x^{3/2}} dx$$

$$+ \int_{150}^{221.0} 8.5 \times 1.225 \times 40^2 \frac{1}{x^2} dx$$

$$D_{\text{avg}} = \int_{150}^{221.0} 8.5 \times 1.225 \times 40^2 \frac{1}{x^2} dx$$

$$= 3.75 \times 10^3$$

④