MAT 126, Lecture 1, Sept 3, 2020
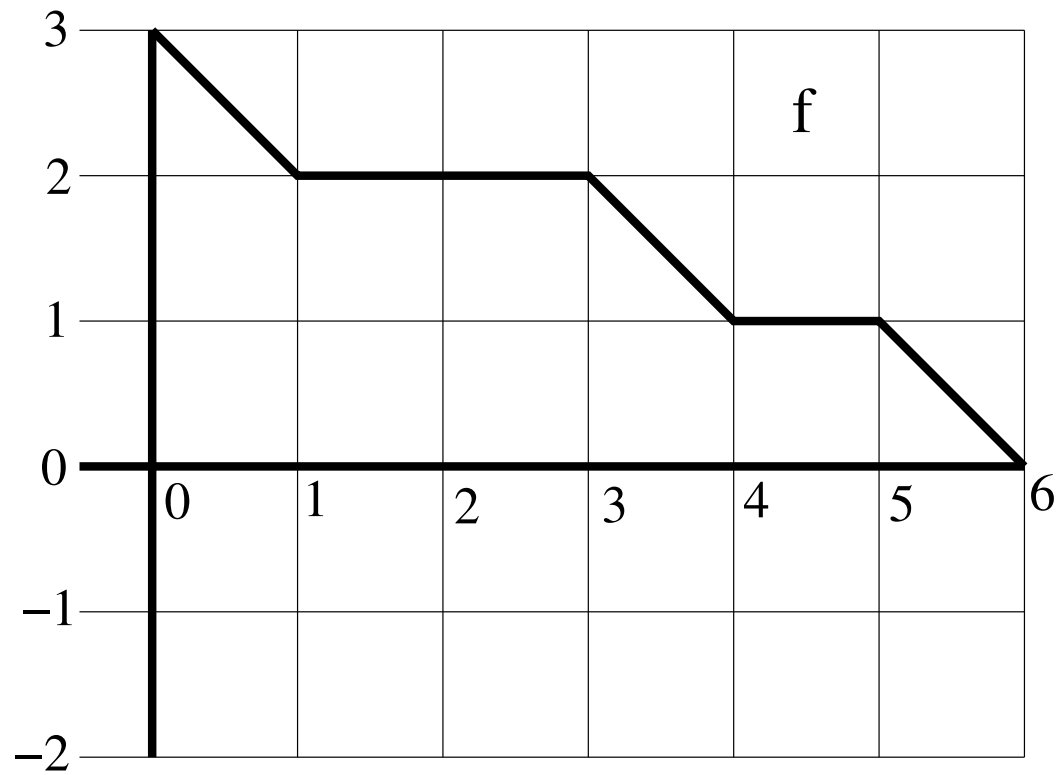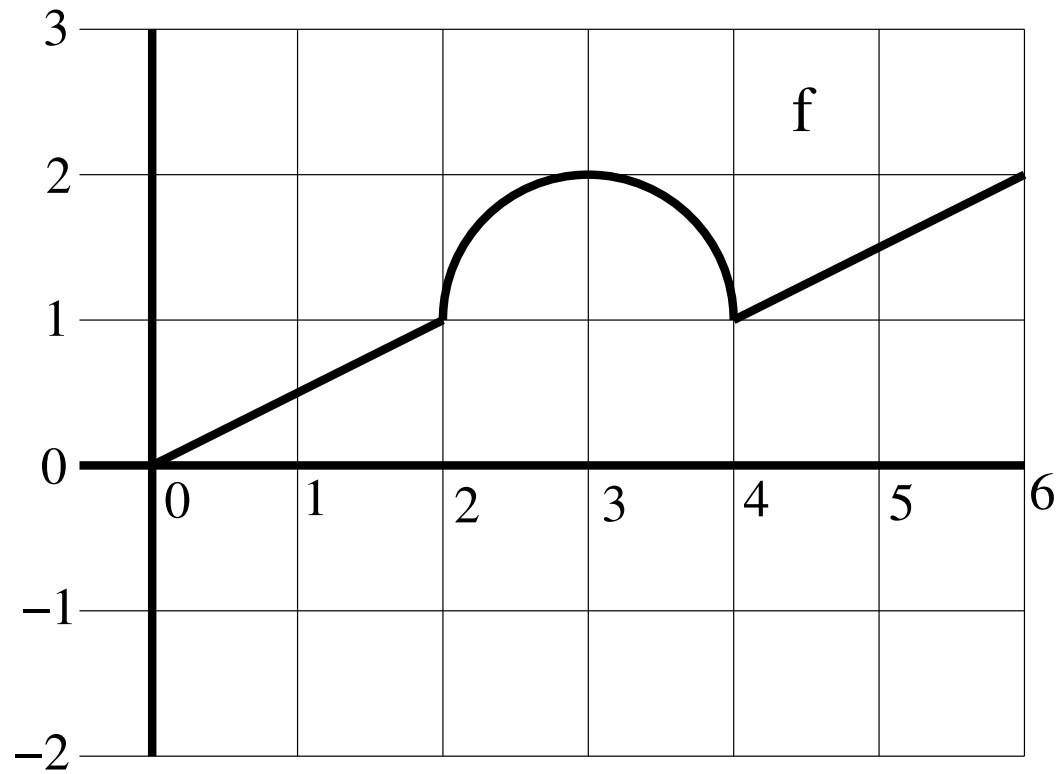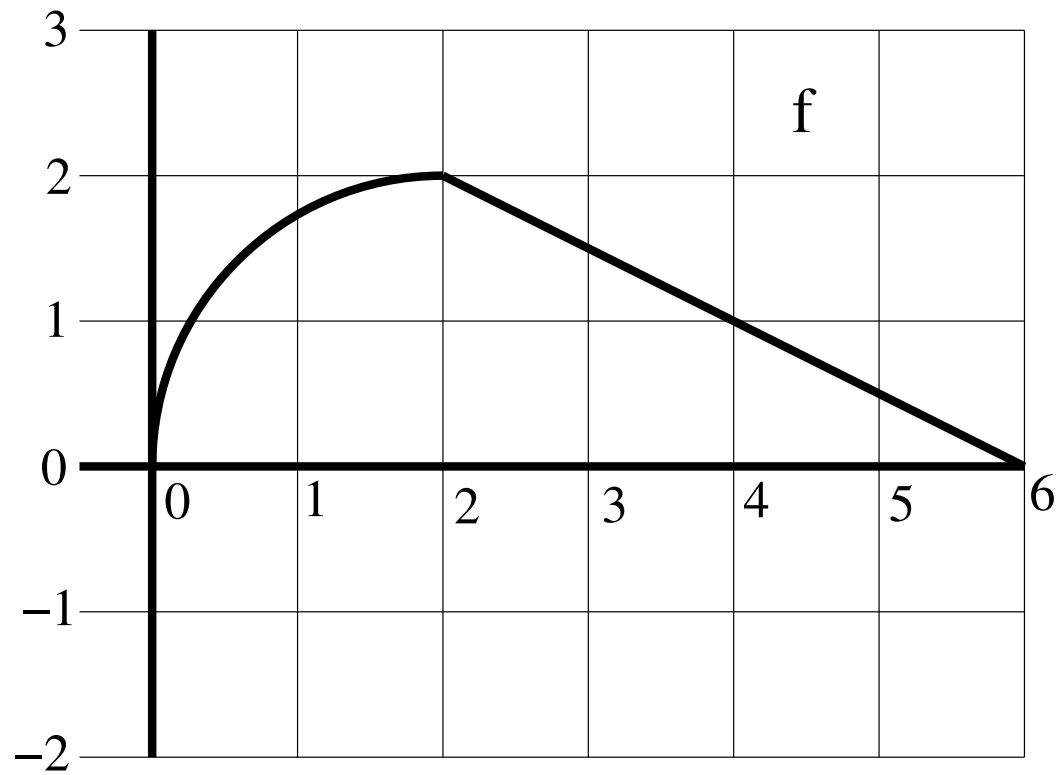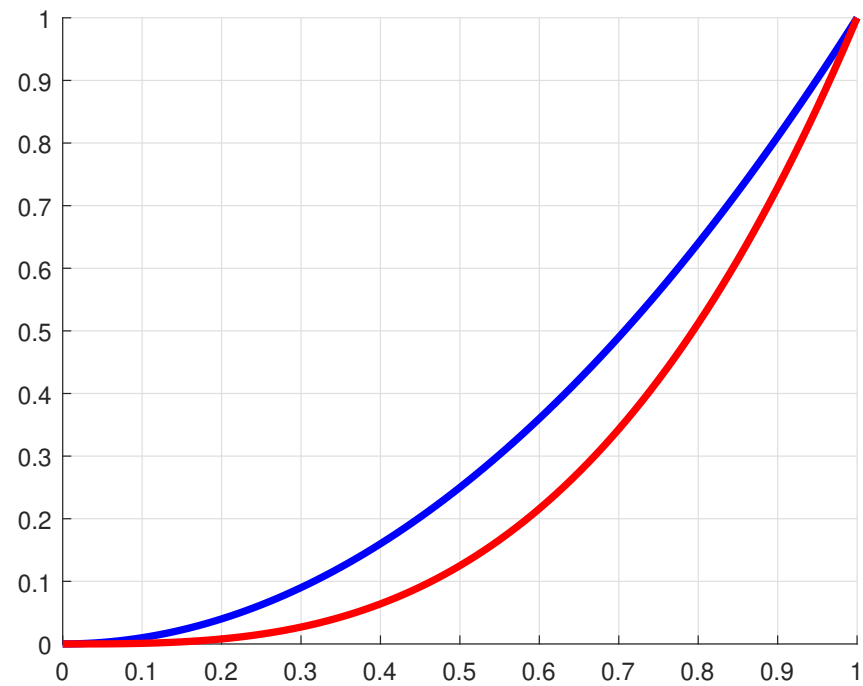
Find $\int_0^6 f(x)dx$ exactly using areas.

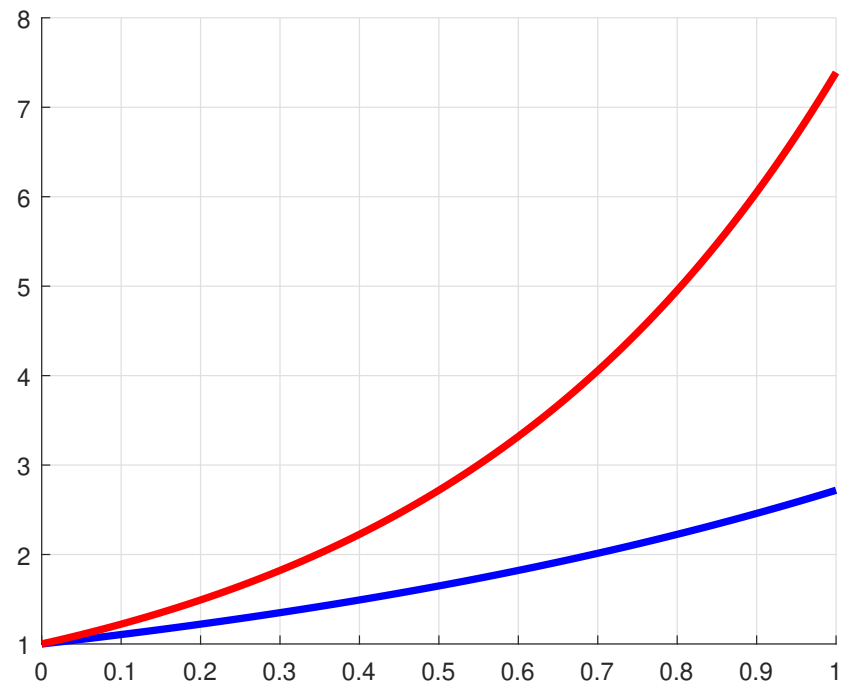Find $\int_0^6 f(x)dx$ exactly using areas.
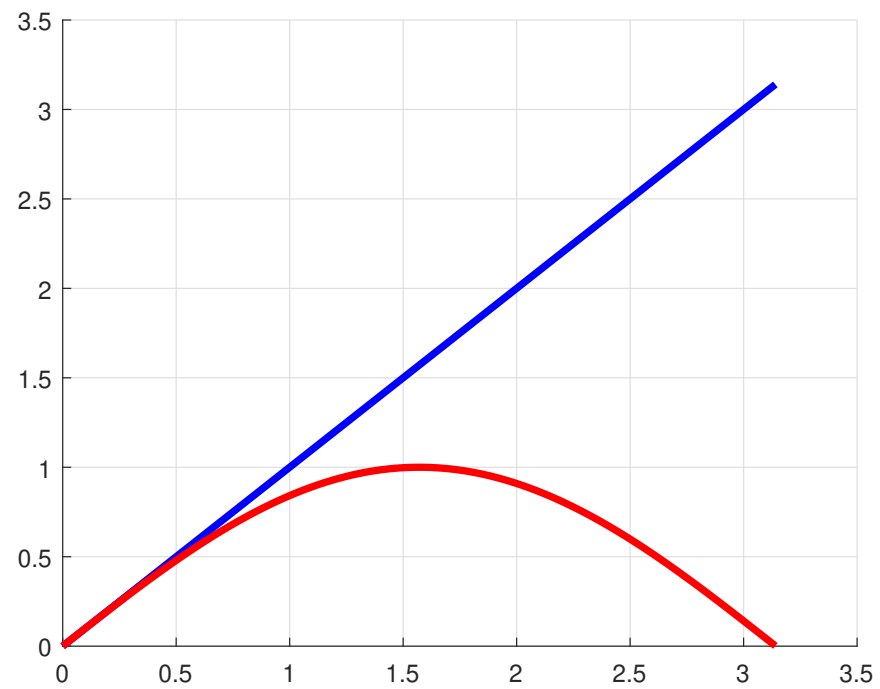
Find $\int_0^6 f(x)dx$ exactly using areas.

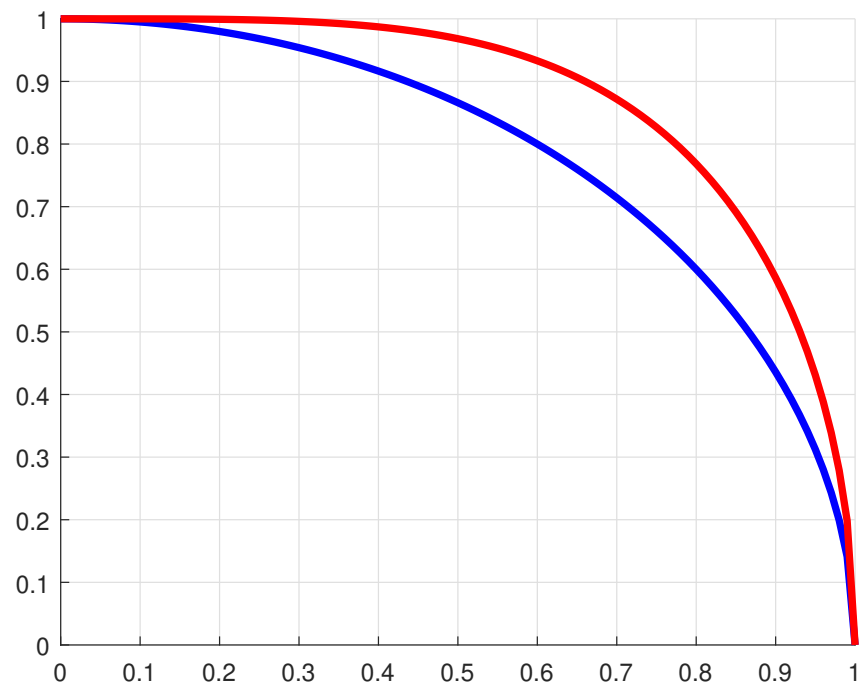Which is larger $\int_0^1 x^2 dx$ or $\int_0^1 x^3 dx$?

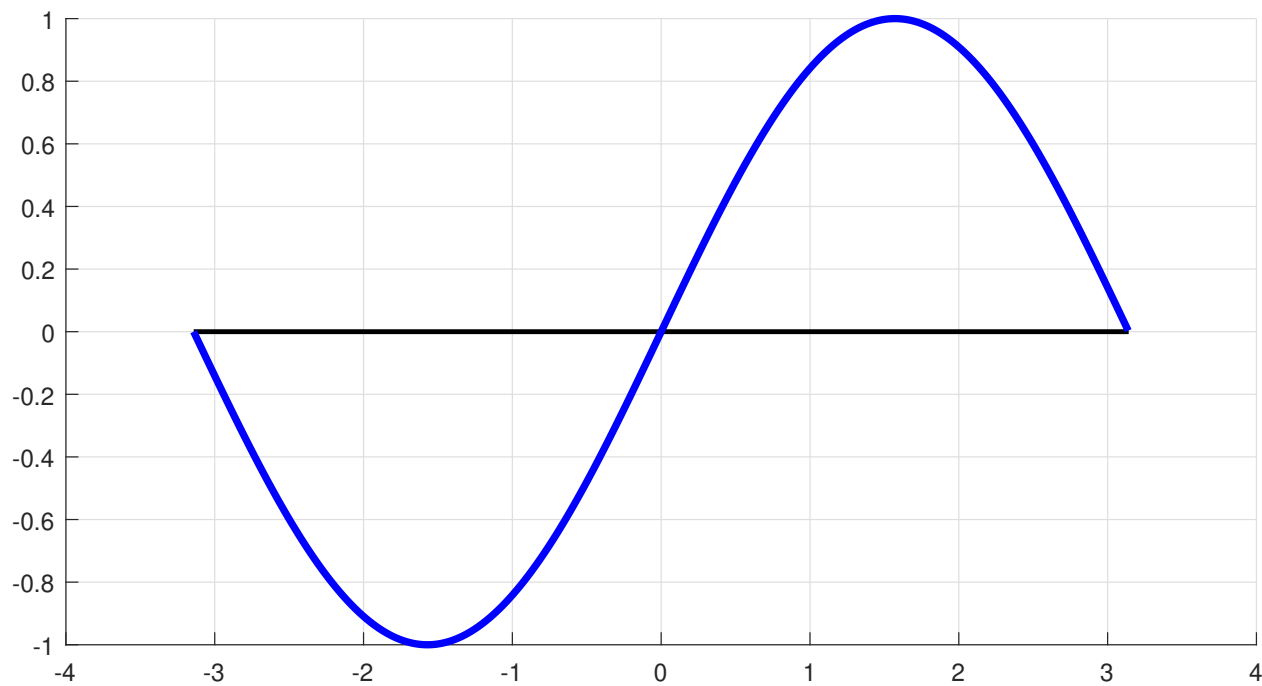Which is larger $\int_0^1 e^x dx$ or $\int_0^1 e^{2x} dx$?

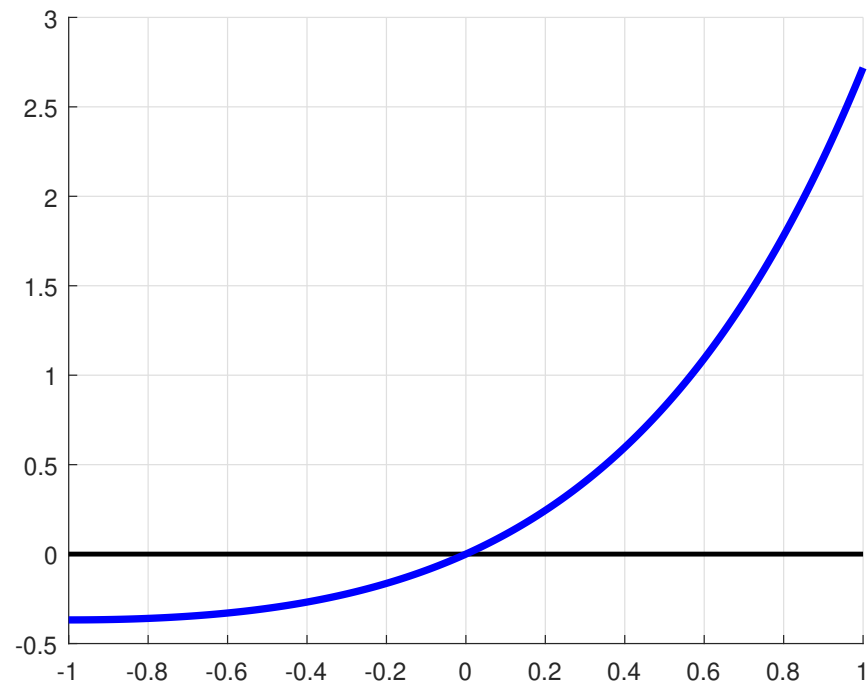Which is larger $\int_0^\pi x$ or $\int_0^\pi \sin(x)$?

Which is larger $\int_0^1 \sqrt{1-x^2}dx$ or $\int_0^1 \sqrt{1-x^4}dx$?

Is $\int_{-\pi}^{\pi} \sin(x)dx$ zero, negative or positive?

Is $\int_{-1}^{1} xe^x dx$ zero, negative or positive?

Is $\int_0^{2\pi} x\sin(x)dx$ zero, negative or positive?