Here are some sample questions from old tests. Some topics that we covered are not represented by these questions, but are still fair game.

1. Compute

(a) $\displaystyle\int_2^3 x\sin(5x)\,dx \ =$

(b) $\displaystyle\int_3^4 7xe^{x^2}\,dx \ =$

(c) $\displaystyle\int 7x^2 e^x\,dx \ =$

(d) $\displaystyle\int x^2\sqrt{x-2}\,dx \ =$

(e) $\displaystyle\int_0^3 \frac{1}{\sqrt{x}}dx \ =$

(f) $\displaystyle\int_3^\infty \frac{1}{\sqrt{x}}\,dx \ =$

(g) $\displaystyle\int_3^\infty \frac{1}{x^2}\,dx \ =$

(h) $\displaystyle\int xe^{-3x}dx \ =$

(i) $\displaystyle\int \frac{5}{x^2+x-2}\,dx \ =$

(j) $\displaystyle\int \frac{x\ln(1+x^2)}{1+x^2}\,dx \ =$

(k) $\displaystyle\int_1^4 (x-2)^{-1/3}\,dx \ =$

(l) $\displaystyle\int x\ln(x)dx$

(m) $\displaystyle\int \frac{\ln(x)}{x}dx$