5. $\displaystyle\int \frac{x^3 + 9x^2 + 1}{x^2 + 2}\,dx$

6. $\displaystyle\int \frac{dx}{\sqrt{-16x^2 + 8x + 3}}$

7. $\displaystyle\int \frac{\sqrt{x - 2}}{x + 1}\,dx$

8. $\displaystyle\int \sec x\,dx$

9. $\displaystyle\int \sin^2 x\,dx$