

Cálculo B - Lista 6

1. $\int \frac{3dz}{8+7 \cos z}$
2. $\int \frac{dx}{1+\sin x}$
3. $\int \frac{3dx}{7+8 \cos x}$
4. $\int \frac{dx}{\sin x - \cos x + 2}$
5. $\int \frac{dx}{\sin x + \tan x}$
6. $\int \frac{dx}{5+4 \cos x}$
7. $\int \frac{dx}{3-5 \sin x}$
8. $\int \frac{dx}{4 \sin x - 3 \cos x} dx$

Respostas

1. $\frac{6}{\sqrt{15}} \arctan\left(\frac{1}{\sqrt{15}} \tan \frac{x}{2}\right) + C$
2. $\frac{-2}{1+\tan \frac{x}{2}} + C$
3. $\frac{3}{\sqrt{15}} \ln \left| \frac{\sqrt{15} + \tan \frac{x}{2}}{-\sqrt{15} + \tan \frac{x}{2}} \right| + C$
4. $\sqrt{2} \arctan\left(\frac{1+3 \tan \frac{x}{2}}{\sqrt{2}}\right) + C$
5. $\frac{1}{2} \ln |\tan \frac{x}{2}| - \frac{1}{4} \tan^2 \frac{x}{2} + C$
6. $\frac{2}{3} \arctan\left(\frac{1}{3} \tan \frac{x}{2}\right) + C$
7. $\frac{1}{4} \ln \left| \frac{-3 + \tan \frac{x}{2}}{-\frac{1}{3} + \tan \frac{x}{2}} \right| + C$
8. $\frac{1}{5} \ln \left| \frac{-\frac{1}{3} + \tan \frac{x}{2}}{3 + \tan \frac{x}{2}} \right| + C$