i) $\displaystyle\int_1^{+\infty} \frac{dx}{\sqrt{(x-4)^5}}$.

ii) $\displaystyle\int_1^{+\infty} \frac{x\,dx}{\sqrt{1+x^2}}$.

iii) $\displaystyle\int_2^{+\infty} \frac{dx}{x \ln^3 x}$.

iv) $\displaystyle\int_0^{+\infty} \frac{e^x}{1+e^x}dx$.

v) $\displaystyle\int_0^{\frac{\pi}{2}} \tan x\,dx$.

vi) $\displaystyle\int_2^{+\infty} \frac{dx}{x^2-1}$.

S[1;+oo)(dx/V(x+4)^5)=lim(b->+oo)(-2/(3(x+4)^3/2))|[1;b]=
=-2/(3(b+4)^3/2)+2/(3(5)^3/2)=2/(3(5)^3/2)

S(0;P/2)(tanxdx)=S(1;0)(-1/u)du=lim(b->0)(-lnu)|(1;b)=
u=cosx
du=-sinxdx
=(-lnb+ln1)=+oo=>div

S[0;+oo](e^x/(1+e^x))dx=S[2;+oo](1/u)du=
u=1+e^x
du=e^x
=lim(b->+oo)ln(u)|[2;b]=lnb-ln2=+oo => diverges