Determine whether the following improper integrals converge.

i) $\displaystyle\int_{2}^{+\infty} \frac{dx}{\sqrt[5]{3x^6+4}}$. ii) $\displaystyle\int_{0}^{1} \frac{dx}{3-2x\sqrt[5]{x}}$.

S(2;+oo)(dx/(3x^6+4)^(1/5))
1/(3x^6+4)^(1/5) < 1/x^(6/5)

S(2;+oo)(dx/x^(6/5))=lim(b->+oo)-5x^(-1/5)|[2;+b]=
=-5b^(-1/5)+5*2^(-1/5)=5*2^(-1/5)

1/(3-2x^(6/5)) > 1/(3-2x) 1/(3-3x)
S(1/(3-2x))dx=ln|3-2x||(b;1)=
=ln|1|-ln|3-2b| =>

1/(3-2x^2) > 1/(3-2x^(6/5))

S dx/(3-2x^2)=

1/(3-2x^2)=a/(V3-V2x) + b/(V3+V2x)