## Calculus AB

6-1
Area Between Curves
Set up the definite integral that gives the area of the region. (pg 454)
2) $f(x)=x^{2}+2 x+1$

$$
g(x)=2 x+5
$$



Sketch the region bounded by the graphs of the algebraic functions and find the area of the region.

$$
\text { 24) } f(x)=-x^{2}+4 x+1, g(x)=x+1
$$



Set up an integral and use your calculator to find the area bounded by the two functions.

$$
\text { *) } \begin{aligned}
f(x) & =\sqrt[3]{x-3}+2 \\
g(x) & =x-1
\end{aligned}
$$



