1.3 Finding Limits Analytically ( $\omega$ ) Algebra)


Example

$$
\begin{aligned}
& \lim _{x \rightarrow 4} \frac{x-4}{x^{2}+2 x-24} \quad \frac{0}{0} \\
& =\lim _{x \rightarrow 4} \frac{x-4}{(x+6)\left(x^{-4}\right)} 24-1=23^{\mathrm{A}} \\
& =l \\
& \text { 12. }-2=10 \\
& 6 \cdot-4,2
\end{aligned}
$$

## '. $x^{2}-x-12$ <br> $\lim$ <br> $$
x-4
$$

example

$$
\lim _{x \rightarrow 5} \frac{x-5}{x^{2}-25}
$$

$\operatorname{lin}$
ex
ex $\begin{aligned} & \text { Coefficient } \\ & \text { not } \\ & \\ & \quad \lim _{x \rightarrow 3} \rightarrow 3 \\ & \end{aligned} \frac{2 x^{2}-5 x-3}{x-3}$


