

A simple way to format a system of aligned equations or inequalities, like this:

$$\begin{aligned} a + b + m + s &= 26 \\ 6 &\leq a \\ 4 &\leq b \\ 5 &\leq m \\ 3 &\leq s \leq 5 \end{aligned}$$

is by using the align environment:

```
\begin{align*}
    a+b+s &= 26 \\
    6 &\leq a \\
    4 &\leq b \\
    3 &\leq s \leq 5
\end{align*}
```

If you want something more fancy, like this:

$$\left\{ \begin{aligned} a + b + m + s &= 26 \\ 6 &\leq a \\ 4 &\leq b \\ 3 &\leq s \leq 5 \end{aligned} \right.$$

you can use the equation environment as follows:

```
\begin{equation*}
\begin{cases}
\begin{aligned}
a+b+m+s &= 26 \\
6 &\leq a \\
4 &\leq b \\
3 &\leq s \leq 5
\end{aligned}
\end{cases}
\end{equation*}
```

In particular, one student asked me how to do this:

$$\left\{ \begin{array}{l} a + b + s = 26 \\ 6 \leq a \\ 4 \leq b \\ 3 \leq s \leq 5 \end{array} \right. \Rightarrow \left\{ \begin{array}{l} a + b + s = 26 \\ 6 \leq a \\ 4 \leq b \\ 3 \leq s \leq 5 \end{array} \right.$$

Here is the L^AT_EXcode:

```

\begin{minipage}{1.25in}
\begin{equation*}
\begin{cases}
\begin{aligned}
a+b+s &= 26 \\
6 &\leq a \\
4 &\leq b \\
3 &\leq s \leq 5
\end{aligned}
\end{cases}
\end{equation*}
\end{minipage}
%
\hspace{0.1in}
{\Huge $\rightarrow$ }
\hspace{0.1in}
%
%
\begin{minipage}{1.25in}
\begin{equation*}
\begin{cases}
\begin{aligned}
a+b+s &= 26 \\
6 &\leq a \\
4 &\leq b \\
3 &\leq s \leq 5
\end{aligned}
\end{cases}
\end{equation*}
\end{minipage}

```