

First testing some inline  $\sqrt{34}$  math  
 Next for an environment using a snippet:  $\sqrt[3]{8} = 2$   
 Time for some fractions using  $\frac{2^3}{x_a^2}x_2^a$   
 How do symbols look in math env vs not math env?  
 No math: (creates an error)  
 Math:  $\emptyset \infty \equiv \setminus \cdot \times \langle \rangle \hbar \dagger \nabla \Downarrow \rightarrow \Rightarrow \epsilon \varepsilon \varpi$   
 Practicing a numbered equation:

$$5! = 5 \cdot 4 \cdot 3 \cdot 2 \cdot 1 \tag{0.1}$$

$$\text{something} \cdot 8$$

# 1 Something new

$$a, b, c, \cdots, z \tag{1.1}$$

# 2 Another section

$$1, 2, 3 \ldots \infty \tag{2.1}$$

Time to try aligned equations:

$$\begin{aligned}
 1234 &= 1234 \\
 234 &= 2342 \\
 11111111 &= 23422
 \end{aligned}$$

$$\begin{aligned}
 0 &\overset{2x}{\underset{5}{\leftarrow}} \infty \\
 0 &\overset{2x}{\underset{5}{\rightarrow}} \infty
 \end{aligned}$$

$$\begin{aligned}
 a + b &= b \\
 b &= c \\
 c &= d
 \end{aligned} \tag{2.2}$$

$$\frac{123}{234} \tag{2.3}$$

$\sin \theta$   
 Checking out various binomial typesets:

$$\begin{aligned}
 & \binom{2n}{n} \\
 & \binom{2n}{n} \\
 & \binom{2n}{n} \\
 & \binom{2n}{n}
 \end{aligned}
 \tag{2.4}$$

By the way, 0.1 is really cool!  
 Testing maps for the imaps: