

I Heart L^AT_EX

Me!

August 31, 2017

Remember your \$ signs! $x^2 + y^2 = 1$, $\frac{a}{b}$.

1 Lists

1. **First Point (Bold Face)**

2. *Second Point (Italic)*

3. Third Point (Large Font)

(a) First Subpoint (Small Font)

(b) Second Subpoint (Tiny Font)

(c) Third Subpoint (Huge Font)

• Bullet Point (Sans Serif)

◦ CIRCLE POINT (SMALL CAPS)

2 Equations

2.1 Binomial Theorem

Theorem (Binomial Theorem). *For any nonnegative integer n , we have*

$$(1+x)^n = \sum_{i=0}^n \binom{n}{i} x^i$$

2.2 Sets

Theorem. *For any sets A , B and C , we have*

$$(A \cup B) - (C - A) = A \cup (B - C)$$

Proof.

$$\begin{aligned} (A \cup B) - (C - A) &= (A \cup B) \cap (C - A)^c \\ &= (A \cup B) \cap (C \cap A^c)^c \\ &= (A \cup B) \cap (C^c \cup A) \\ &= A \cup (B \cap C^c) \\ &= A \cup (B - C) \end{aligned}$$

□