

# Formalizing Bombieri Vinogradov

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**Theorem 1.**

*Proof.* □

**Theorem 2.**

*Proof.* □

**Theorem 3.**

*Proof.* See p. 279. Uses combinatorics, an estimate on  $\sum_{p \leq x} 1/\log p$  and partial summation. □

**Theorem 4.**

*Proof.* Apply  $BV_D$  and absorb the error terms □