# GRT Statements
A Collection of Unsubstantiated Claims

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*Budapest Semesters in Mathematics*
*Introduction to Mathematical Cryptography*

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## Monday 5th September, 2016

**Definition.** If $V$ is a set and $E \subseteq \binom{[V]}{2}$, then $G = \langle V, E \rangle$ is a simple graph.

**Definition.** Graphs $F$ and $G$ are isomorphic iff there exists some $h : V(F) \leftrightarrow V(G)$ such that $uv \in E(F) \iff h(u)h(v) \in E(G)$.

**Definition.** $\langle V, E \rangle$ where $V = \binom{[5]}{2}$ and $uv \in E$ iff $u \cap v = \varnothing$ is called the Peterseu graph.

**Definition.** If $G$ is a graph, then a sequence of vertices in $G$ $x_1 x_2 \dots x_{n+1}$ such that $x_i x_{i+1} \in E(G)$ for all $1 \leq i \leq n$ is called a walk.

## Friday 11th November, 2016

**Definition.** This document will someday be useful.

**Theorem** (Erdős)**.** *This is a test.*

### [Homework]

**Theorem** (Erdős)**.** *This is a test.*

## Wednesday 21st December, 2016

*Remark.* More information on this day.

**Fact.** *Nothing is real.*