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natural homomorphism

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Defines	Natural homomorphism

The *natural homomorphism* $R \rightarrow R/I$ where R is a ring and I an ideal of R is the map $\alpha \mapsto \alpha + I$. Coset operations, e.g. $(\alpha + \beta) + I = (\alpha + I) + (\beta + I)$ guarantee this will be a homomorphism. Natural homomorphisms for groups can be defined similarly.