

A commutative diagram illustrating a relationship between three objects: R , K , and $Q(R)$.

- The object R is at the top left.
- The object K is at the top right.
- The object $Q(R)$ is at the bottom left.

The maps are represented by arrows:

- A horizontal arrow from R to K is labeled ϕ .
- A vertical arrow from R down to $Q(R)$ is labeled i .
- A diagonal arrow from $Q(R)$ up to K is labeled ψ .

The diagram shows that the composition of maps $\psi \circ i$ from R to K is equal to the map ϕ .