

## 1 | product of polynomials def

If  $p, q \in \mathcal{P}(F)$ , then  $pq \in \mathcal{P}(\mathbb{F})$  is the polynomial defined by

$$(pq)(z) = p(z)q(z)$$

for  $z \in \mathbb{F}$ .

### 1.1 | Axler5.20 Multiplicative Properties of Polynomials