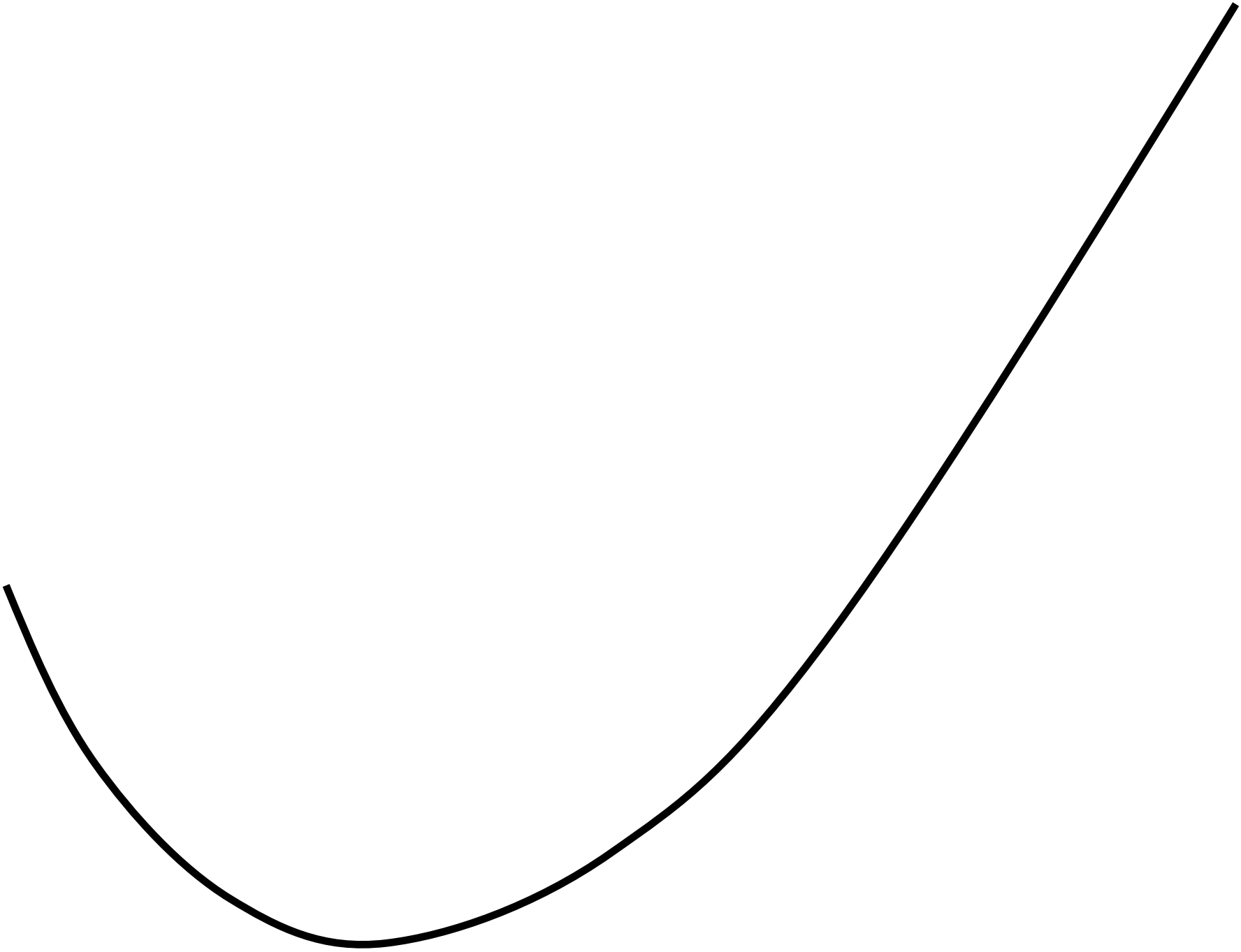
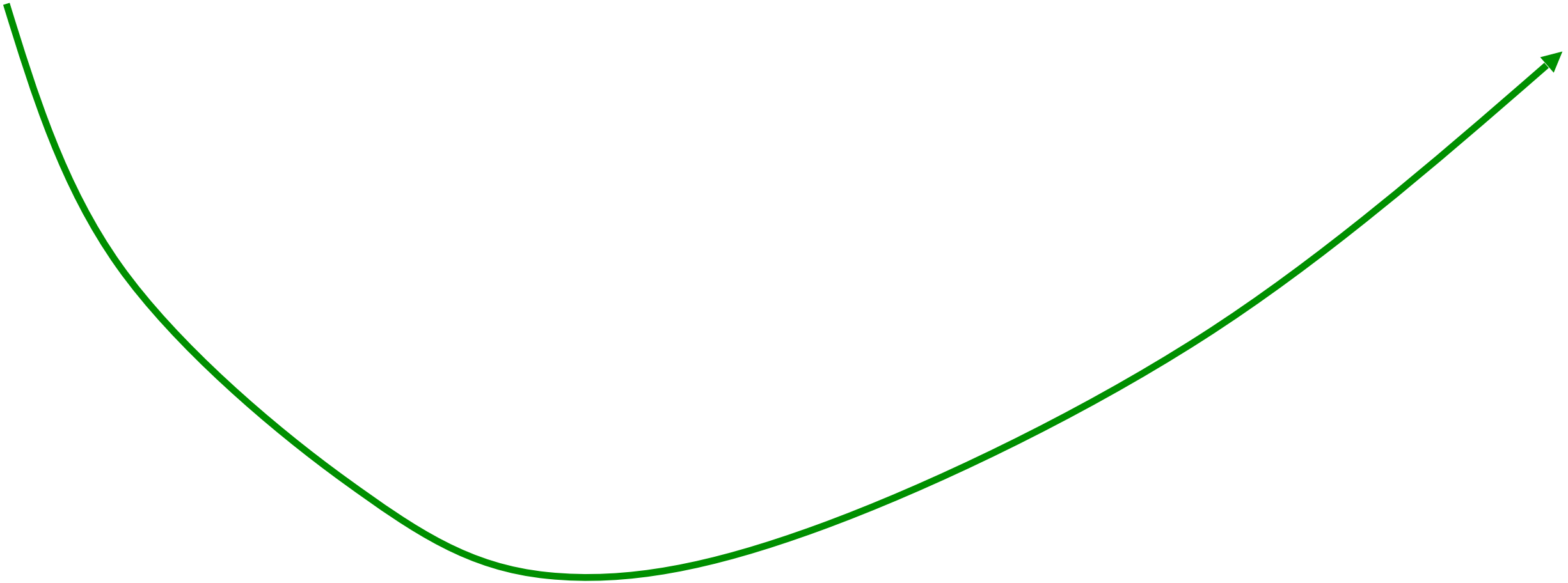
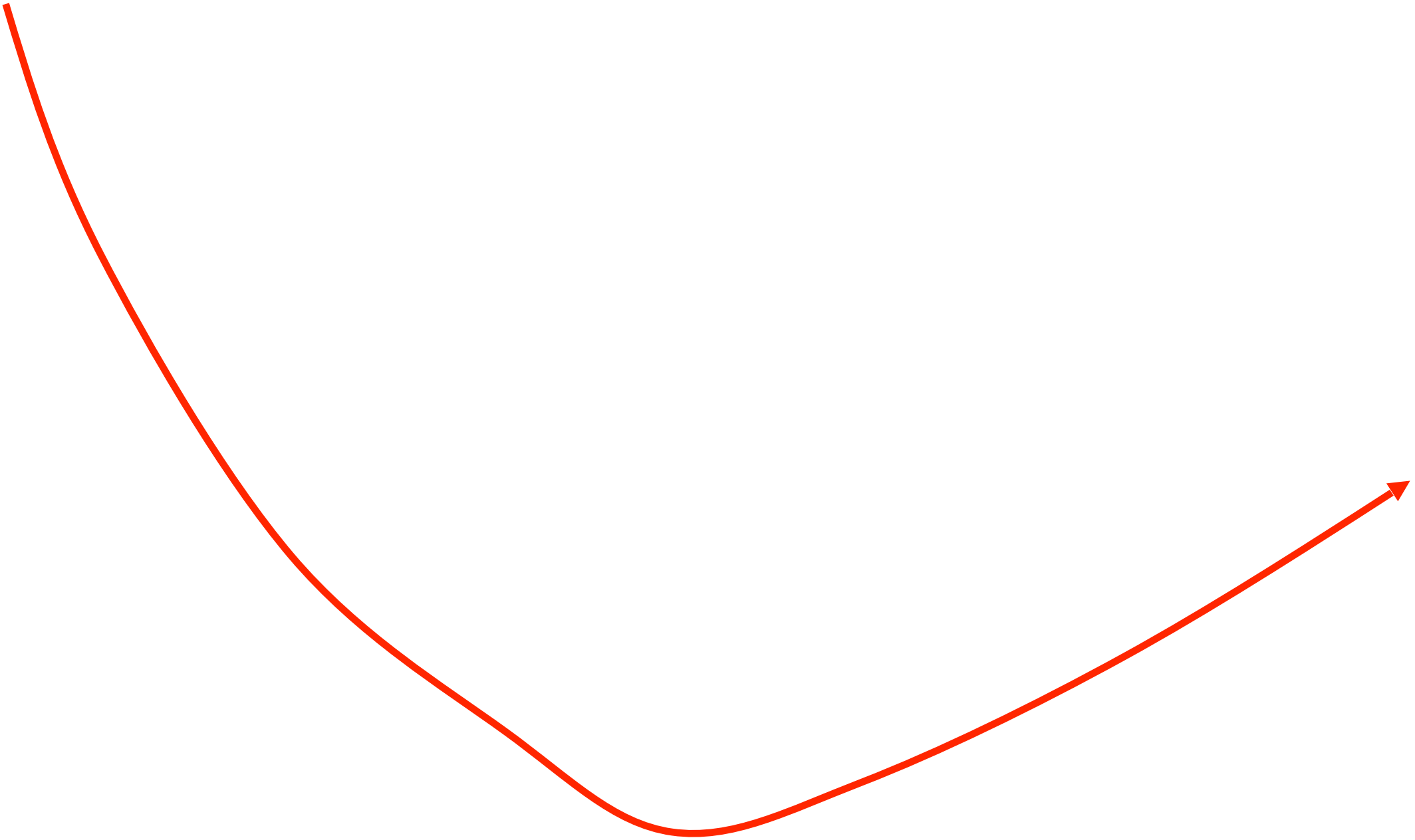
VC



MC

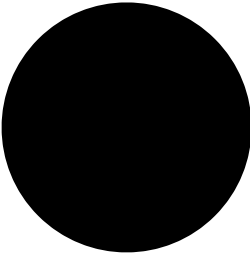


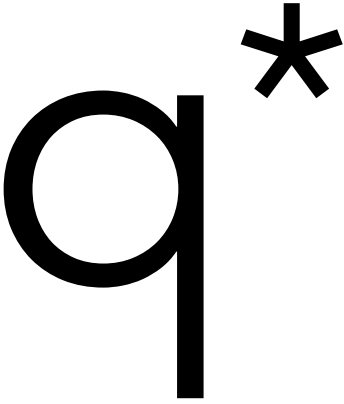
AVC



ATC

MR




q*

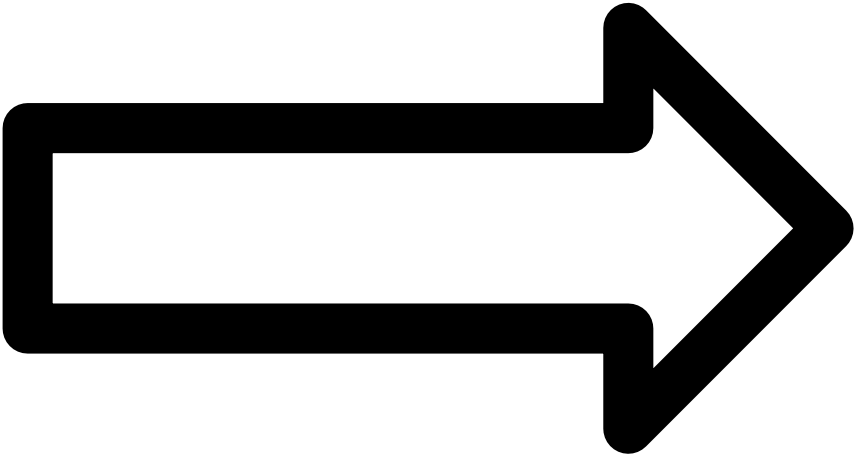
Pe

ATC

AVC

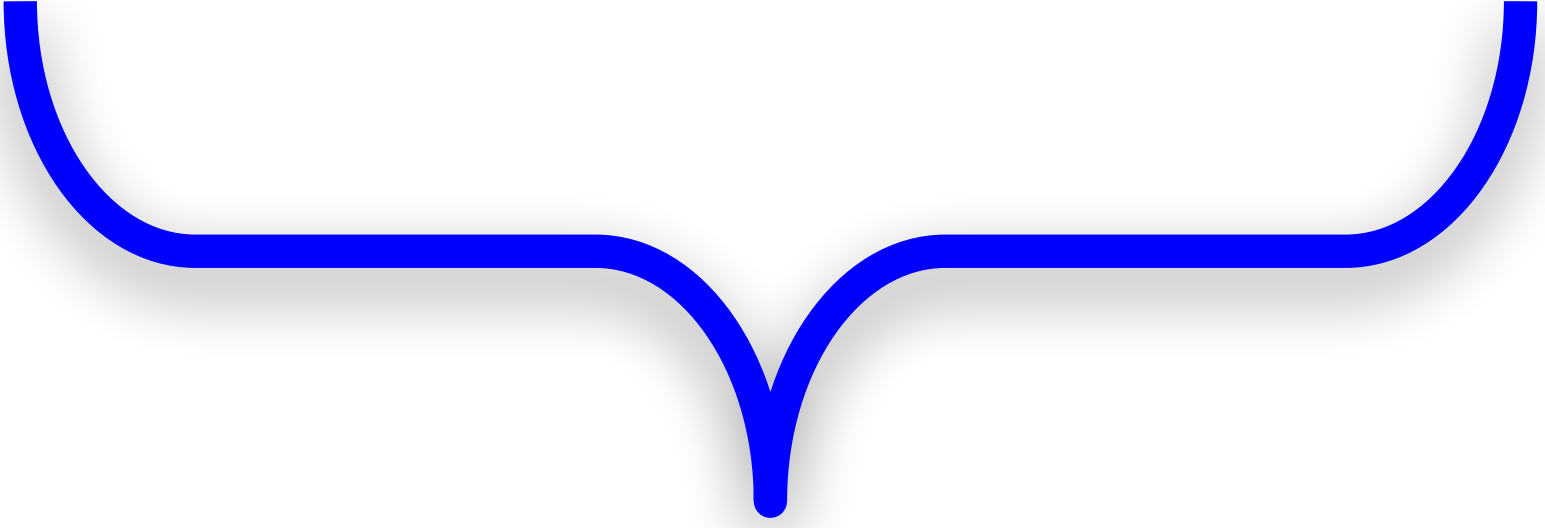
FC

$P_e < AVC < ATC$

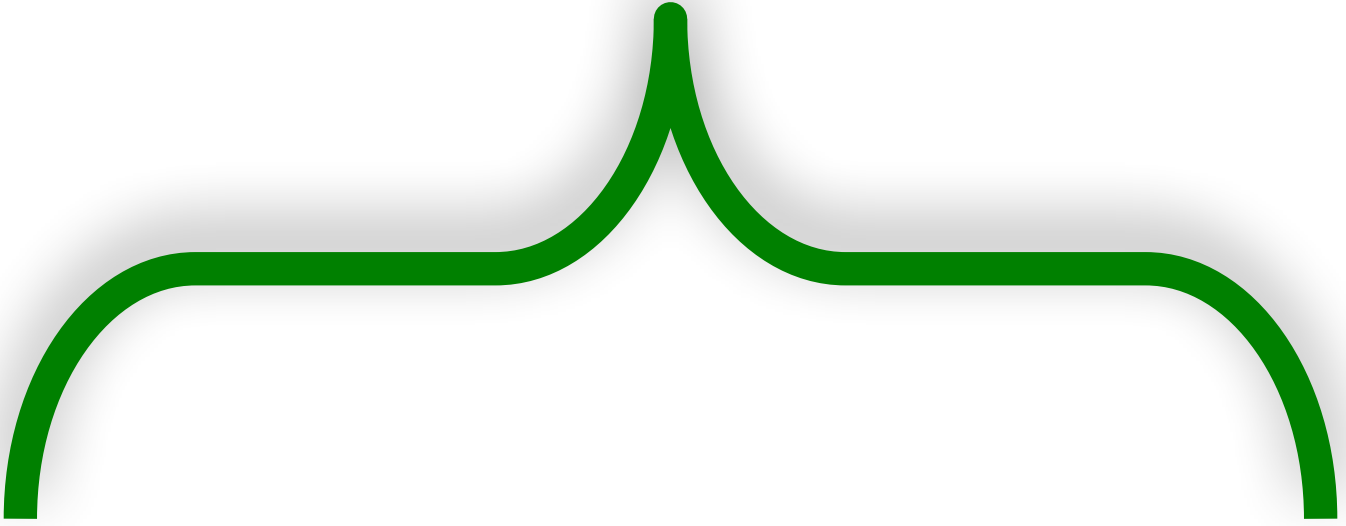


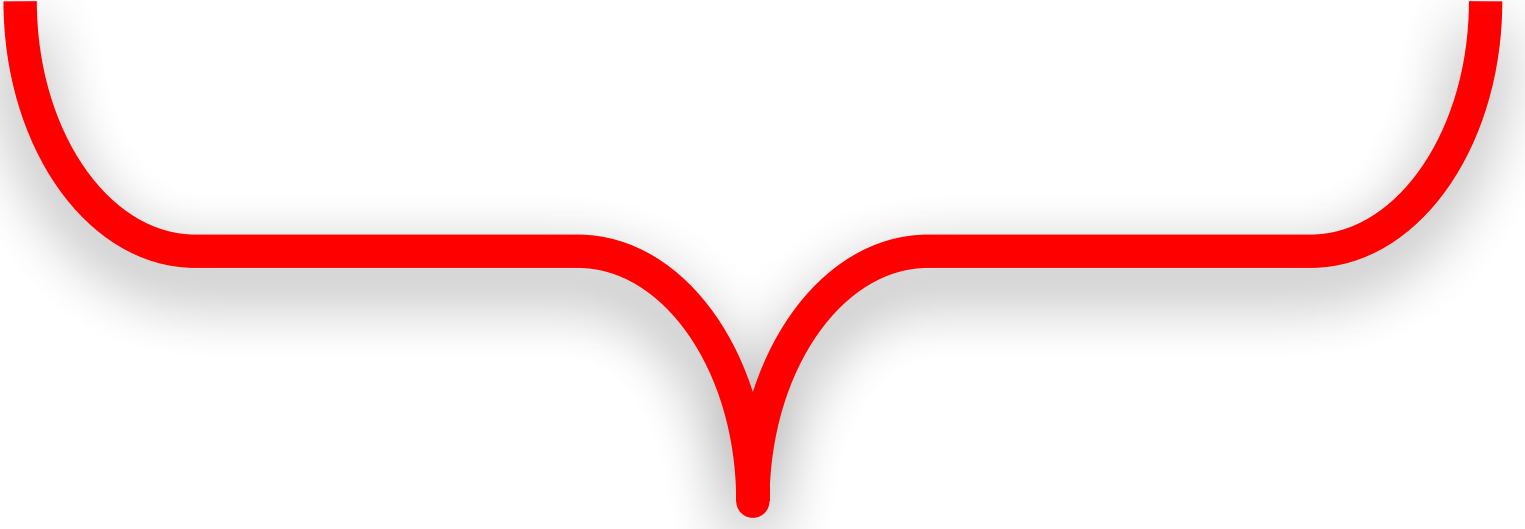
Revenue less than VC

$$P_e \times Q < AVC \times Q < ATC \times Q$$

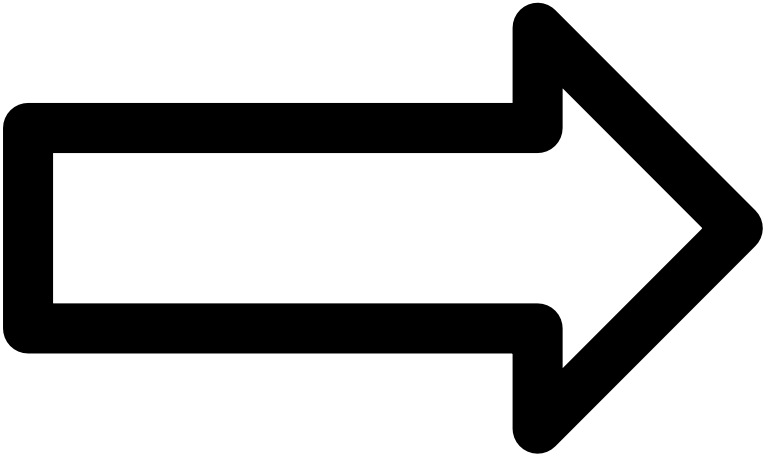


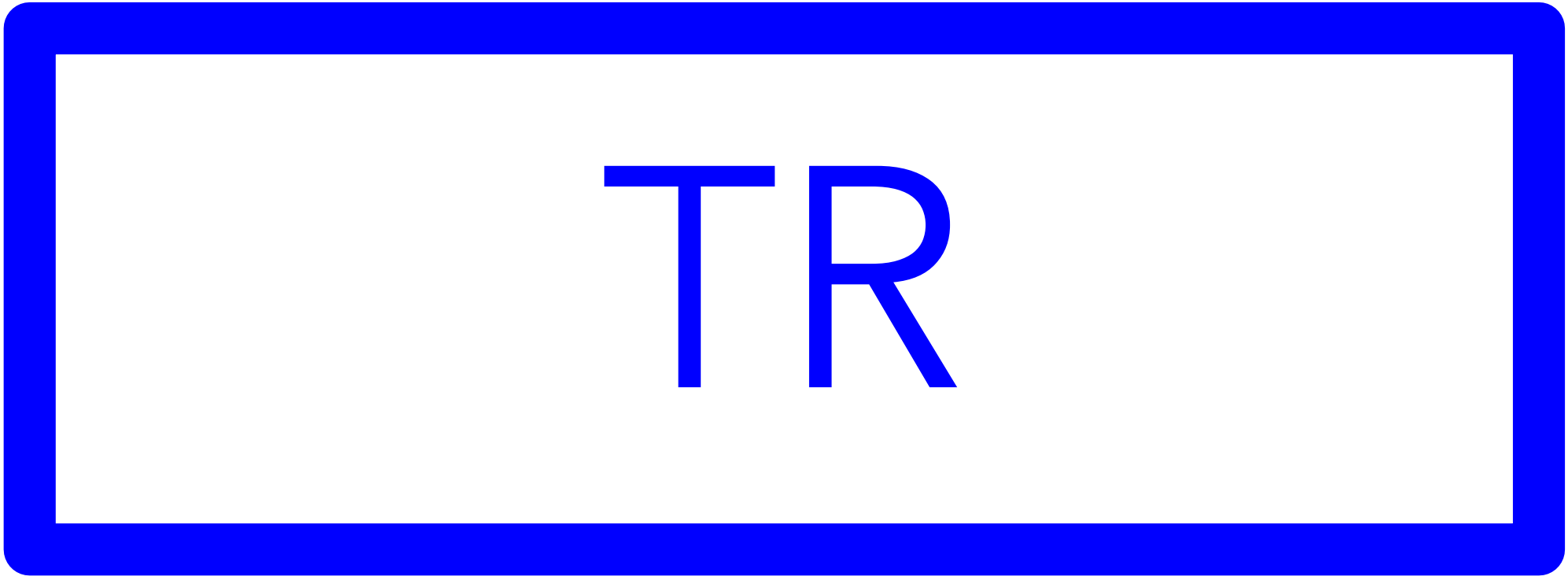
TR < VC < TC





Firm incurs a loss larger than the FC




TR

Firm incurs a loss larger than the loss if it shuts down

Firm should shut down in the short run and exit in the long run

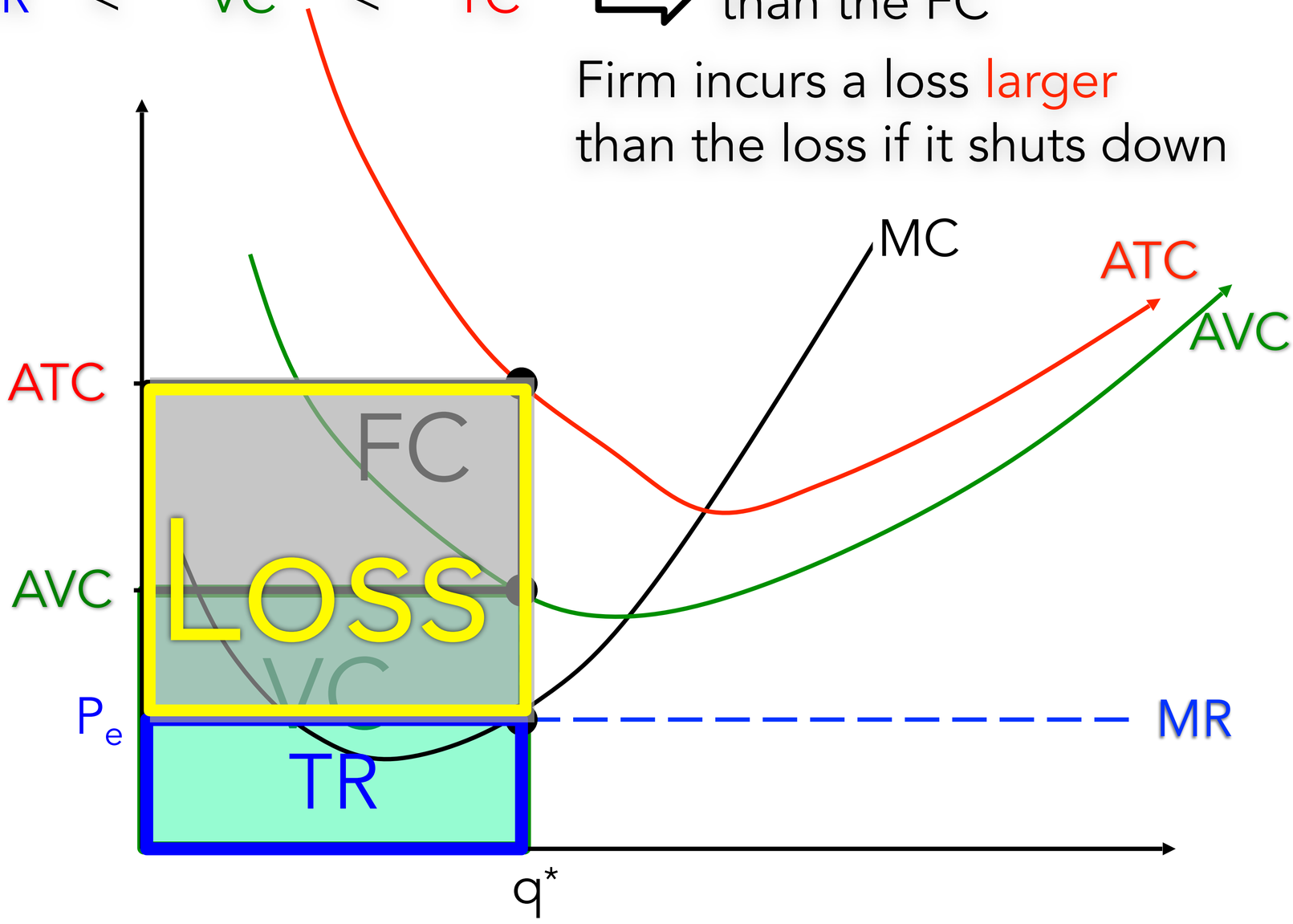
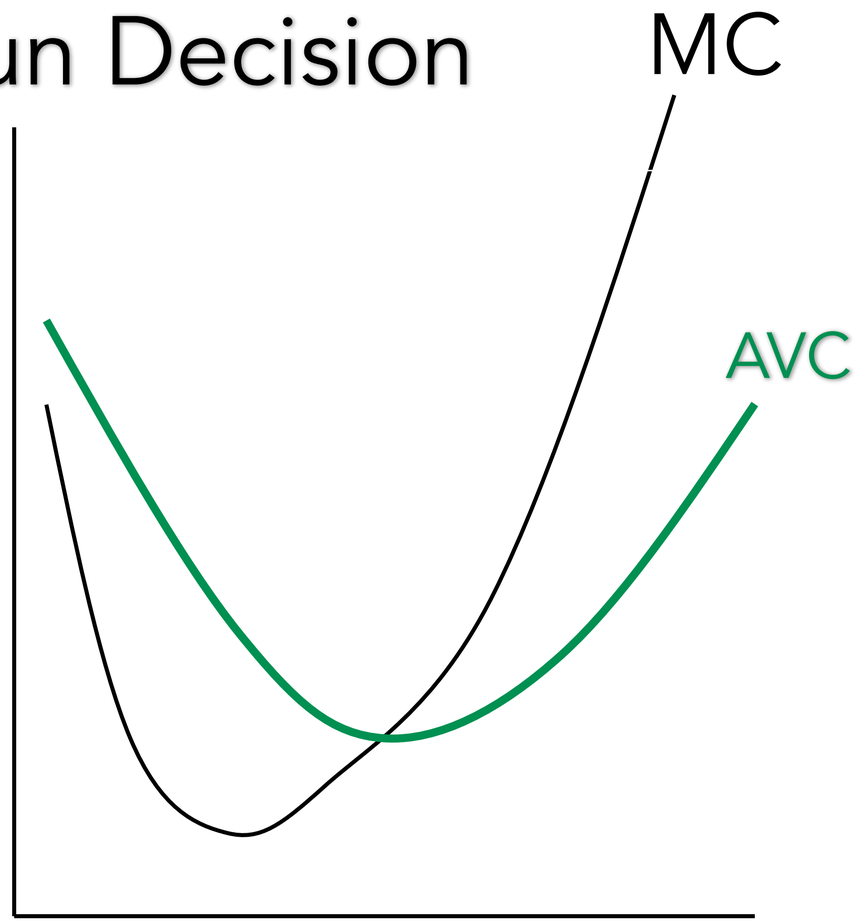
LOSS

$P_e < AVC < ATC \Rightarrow \underbrace{P_e \times Q}_{TR} < \underbrace{AVC \times Q}_{VC} < \underbrace{ATC \times Q}_{TC}$

Firm incurs a loss larger than the FC

Firm incurs a loss larger than the loss if it shuts down

Firm should shut down in the short run and exit in the long run



The Firm's Short Run Decision