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0.0.1 Cournot duopoly

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Cournot really invented the concept of game theory almost 100 years before John Nash, when he looked at the case of how businesses might behave in a duopoly. There are two firms operating in a limited market. Market production is: $P(Q)=a-bQ$, where $Q=q1+q2$ for two firms. Both companies will receive profits derived from a simultaneous decision made by both on how much to produce, and also based on their cost functions: $TCi=C-qi$.