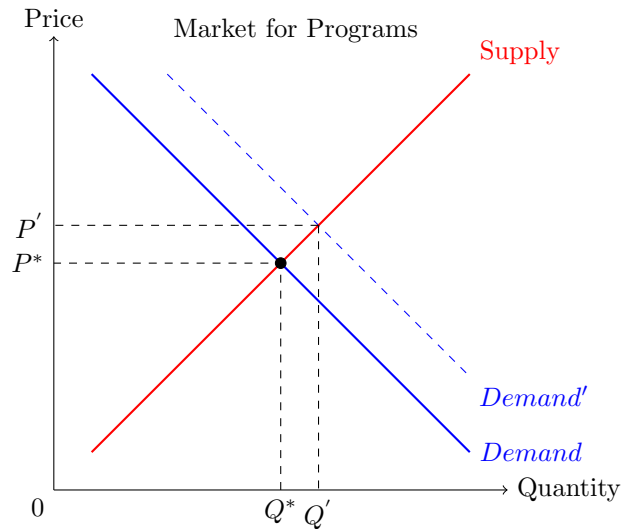


## Complementary and substitutes markets

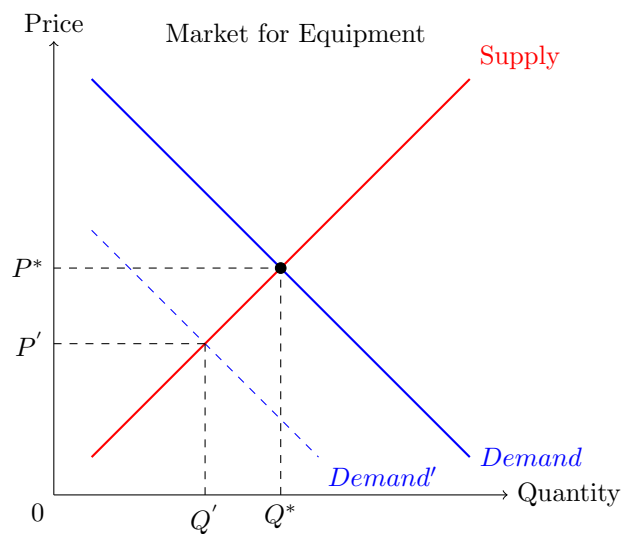
1. Computers and software programs are complementary goods. Analyze the effects on the price and equilibrium quantity.
  - a) In the software market, when the price of computers decreases.
  - b) In the computer market, when the price of software increases.
2. Suppose a recent study shows that battery-operated toys are harmful to children's development and recommends that parents take this into account when making purchases. Graphically show the effect on the price and quantity in each of the following markets:
  - a) The market for battery-operated toys.
  - b) The market for D batteries.
  - c) The market for yo-yos (which do not need batteries).

## Solution

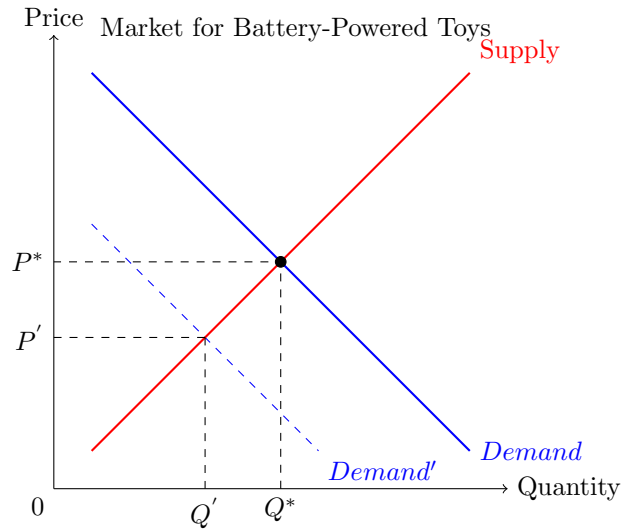
1. If the price of equipment decreases, then more programs will also be demanded, which will increase the demand for programs. This implies a shift that will raise the equilibrium price and quantity.



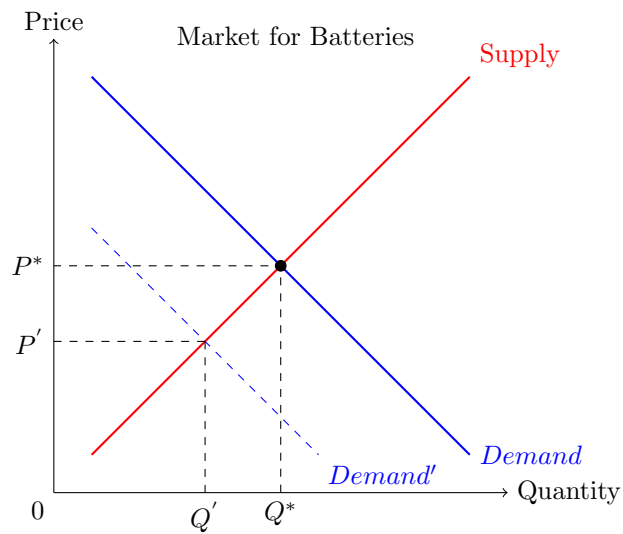
If the price of programs increases, then in the equipment market, the demand will decrease, leading to a lower equilibrium price and quantity.



In the market for battery-powered toys, demand will decrease since these toys are harmful. This leads to a reduction in the equilibrium price and quantity.



In the battery market, demand will decrease because batteries are complementary goods to battery-powered toys. Both equilibrium price and quantity will decrease.



In the yo-yo market, demand will increase as these goods are substitutes for battery-powered toys, meaning more yo-yos are purchased than before. This leads to an increase in the equilibrium price and quantity.

