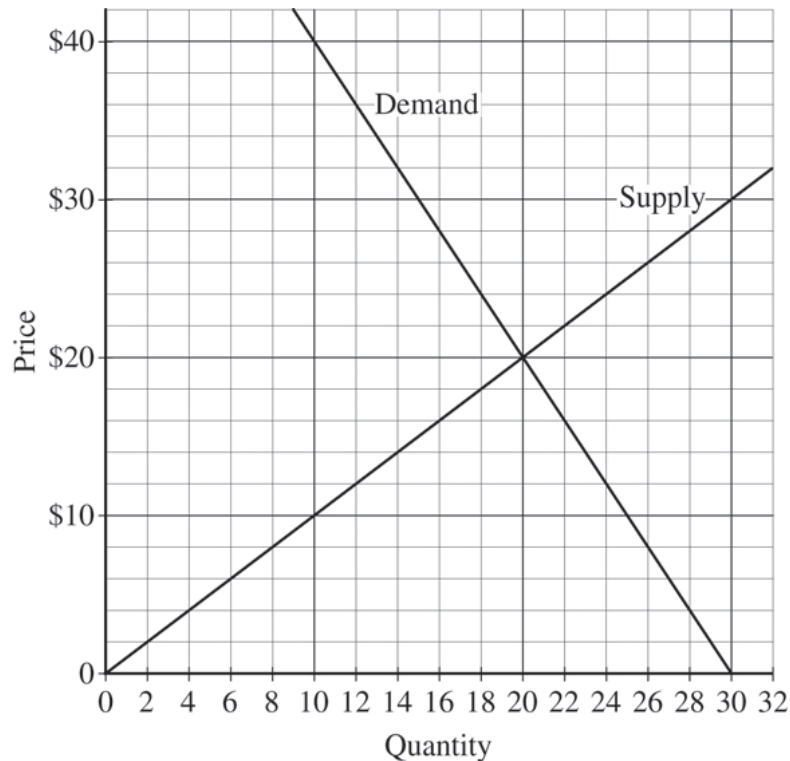


3. The graph below shows the market for widgets. The government is considering intervening in this market.



- (a) Calculate the total producer surplus at the market equilibrium price and quantity. Show your work.
- (b) If the government imposes a price floor at \$16, is there a shortage, a surplus, or neither? Explain.
- (c) If instead the government imposes a price ceiling at \$12, is there a shortage, a surplus, or neither? Explain.
- (d) If instead the government restricts the market output to 10 units, calculate the deadweight loss. Show your work.
- (e) Assume the price decreases from \$20 to \$12.
 - (i) Calculate the price elasticity of demand. Show your work.
 - (ii) In this price range, is demand perfectly elastic, relatively elastic, unit elastic, relatively inelastic, or perfectly inelastic?

STOP

END OF EXAM