A company estimates the demand for its product is given by:

Q = 400 – 3 P + 0.01 I + 2 PY

The price (P) is $300, the level of income (I) is $60,000, and the price of another product (PY) is $200.

a. Calculate the point price elasticity of demand at the current price.

b. Calculate the point income elasticity of demand at the current level of income. Based on the calculated income elasticity, what type of product is involved?

c. Calculate the point cross-price elasticity of demand at the current price of the other product. Based on the calculated cross-price elasticity, what is the relationship between the two products?