Suppose that Management of Wendy’s has completed a study of monthly demand for its hamburgers in the Houston market. The study revealed that
\[ Q_W = 150 - 500P_W + 400P_{MD} + 300P_{BK}, \]
where \( Q_W \) is the number of hamburgers sold at Wendy’s per store per month, \( P_W \) is the monthly average price of hamburgers at Wendy’s, \( P_{MD} \) is the monthly average price of hamburgers at Mc Donald’s, and \( P_{BK} \) is the monthly average price of hamburgers at Burger King. For the typical Wendy’s outlet,
\[ P_W = $2, P_{MD} = $1.50, \text{ and } P_{BK} = $2.50. \]

(1 pt) (a) Estimate the monthly sales at the typical Wendy’s outlet in the Houston market. 

(1 pt.) (b) What is the own-price elasticity for hamburgers at the typical Wendy’s outlet in the Houston market?

(1 pt) (c) To raise revenue, should Wendy’s raise its price? Why or why not?

(1 pt) (d) What is the cross-price elasticity of demand for Wendy’s hamburgers with respect to Burger King?

(1 pt) (e) If Burger King raised their price by 10 percent, all other factors constant, how would sales be affected at Wendy’s?