

City high point Crossover

The City of High Point is buying new school buses for the local school system. High Point has found two models of school buses that it is interested in. Eagle Mover costs \$80,000 to buy and uses diesel fuel, with an average fuel efficiency of 10 miles per gallon. Eagle Mover has an operating cost of \$.28 per mile. Yellow Transport, a hybrid bus, costs \$105,000 to buy and uses diesel fuel and battery power, getting an average of 22 miles per gallon. Yellow Transport has an operating cost of \$.32 per mile. The distance traveled annually is determined to be 25,000 miles, with the expected life of either bus to be 10 years. The average diesel price is \$3.50 per gallon

- A) Based on life cost, which bus is the better choice ?
- B) How many miles does the school district need to put on a bus for costs to be equal ?
- C) What is the crossover point in years ?