Aggregate Function Practice Problems

1) How many rows are in the Person.Person table? Use an aggregate function **NOT** "SELECT *".
2) How many rows in the Person.Person table do not have a NULL value in the MiddleName column?
3) What is the average StandardCost (located in Production.Product) for each product where the StandardCost is greater than $0.00?
4) What is the average Freight amount for each sale (found in Sales.SalesOrderHeader) where the sale took place in TerritoryID 4?
5) How expensive is the most expensive product, by ListPrice, in the table Production.Product?
6) Join the Production.Product table and the Production.ProductInventory table for only the products that appear in both table. Use the ProductID as the joining column. Production.ProductInventory contains the quantity of each product (several rows can appear for each product to indicate the product appears in multiple locations). Your goal is to determine how much money we would earn if we sold every product for its list price for each product with a ListPrice greater than $0. That is, if you summed the product of each product's inventory by its list price, what would that value be? (Hint: This is intentionally challenging. You must use an aggregate function with a mathematical expression to accomplish your goal)

Aggregate Function Practice Problem Solutions

Question 1:

```
SELECT COUNT(*)
FROM Person.Person
```

Question 2:

```
SELECT COUNT(MiddleName)
FROM Person.Person
```

Question 3:

```
SELECT AVG(StandardCost)
FROM Production.Product
WHERE StandardCost > 0
```

Question 4:

```
SELECT AVG(Freight)
FROM Sales.SalesOrderHeader
WHERE TerritoryID = 4
```

Question 5:

```
SELECT MAX(ListPrice)
FROM Production.Product
```

Question 6:

```
SELECT SUM(P.ListPrice*I.Quantity)
FROM Production.Product P
INNER JOIN Production.ProductInventory I
ON I.ProductID = P.ProductID
WHERE P.ListPrice > 0
```