ACCT6

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| Speedy Parcel Service operates a fleet of delivery trucks in a large metropolitan area. A careful study by the company’s cost analyst has determined that if a truck is driven 138,000 miles during a year, the average operating cost is 14.8 cents per mile. If a truck is driven only 92,000 miles during a year, the average operating cost increases to 18.6 cents per mile. |

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| **Required:** | |
| **1.** | Using the high-low method, estimate the variable and fixed cost elements of the annual cost of truck operation. **(Round the "Variable cost per mile" to 3 decimal places and the "Fixed cost" to the nearest dollar amount. Omit the "$" sign in your response.)** |

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| Variable cost | $ | per mile |
| Fixed cost | $ | per year |
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| **2.** | Express the variable and fixed costs in the form *Y* = *a* + *bX*. **(Round the "Variable cost per mile" to 3 decimal places and the "Fixed cost" to the nearest dollar amount. Omit the "$" sign in your response.)** |

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| Y  = | $ | + | $ | X |

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| **3.** | If a truck were driven 115,000  miles during a year, what total cost would you expect to be incurred? **(Round the "Variable cost per mile" to 3 decimal places. Round your intermediate and final answers to the nearest dollar amount. Omit the "$" sign in your response.)** |