Rental car decisions

There are two good rental car companies that your travel agency has worked with in the past in Orlando, Florida. They are both good companies and provide quality cars to their customers. The difference between the companies is their daily car rental fees and their per mileage fees.   Your job is to help the family make the best decision for their travel arrangements based on how many miles they plan to drive the car each day.

Rental car company information

Company #1: Easy Save Rent-A-Car
                Daily car rental fee = $10.00
                Charge per mile = $1.50

Company #2: Drive Around Town Rent-A-Car
                Daily car rental fee = $40.00
                Charge per mile = $0.25

1. Write the information given above in the form of two linear equations.

   a. Easy Save Rent-A-Car: _____

   b. Drive Around Town Rent-A-Car: _____

2. Graph the two linear equations on your graphing calculator and give the ordered pair for the point at which they intersect.

           Point of Intersection: (_____,_____)

3. Use this information to explain to the family which company they should use and why they should use that company.

   _____

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   _____

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4.   Write the information given above in the form of two linear equations.

    a.   Easy Save Rent-A-Car: **y = 1.5x + 10**

    b.   Drive Around Town Rent-A-Car: **y = 0.25x + 40**

5.   Graph the two linear equations on your graphing calculator and give the ordered pair for the point at which they intersect.

                        Point of Intersection: (**24** , **46**)

6.   Use this information to explain to the family which company they should use and why they should use that company.

        Answers may vary, but should include the interpretation of the graphs. Specifically, students should identify that the cost for both companies is the same if the family drives 24 miles each day (cost of $46 per day). If they expect to drive less than 24 miles each day, then they should use the Easy Save Rent-A-Car company because it will cost them less money. If they expect to drive more than 24 mile each day, then they should use the Drive Around Town Rent-A-Car company because that will cost less.