Liam and Tobet are going to walk in a fund-raising event to raise money for their school.

- Liam's mother promised to donate to the school $4 per mile that Liam walks, plus an additional $30.

- Tobet's father promised to donate to the school $6 per mile that Tobet walks, plus an additional $20.

a. If Liam walks 15 miles during the event, what is the total amount of money his mother will donate? Show or explain how you got your answer.

b. Write an equation that represents y, the total amount of money Liam's mother will donate if Liam walks x miles during the event.

c. Write an equation that represents y, the total amount of money Tobet's father will donate if Tobet walks x miles during the event.

After the event, Liam and Tobet compared their results. Liam had walked the same number of miles as Tobet. Liam's mother had donated the same amount of money as Tobet's father.

d. Using your two equations from parts (b) and (c), determine the number of miles Liam and Tobet each walked during the event. Show or explain how you got your answer.

e. Using your answer from part (d), determine the total amount of money Liam's mother and Tobet's father **each** donated. Show or explain how you got your answer.