17 When Nuri buys an item from a catalog, the total amount he pays is made up of the following three amounts of money:

- the price of the item
- sales tax of 5% of the price of the item
- a fixed shipping fee that is always the same regardless of the cost or size of the order

Nuri bought a game with a price of $100 from the catalog.

a. What was the sales tax, in dollars, that Nuri paid on the game? Show or explain how you got your answer.

b. The total amount, including the sales tax and the shipping fee, that Nuri paid for the game was $120. What was the shipping fee, in dollars? Show or explain how you got your answer.

c. Nuri bought an item with a price of $400 from the catalog. What is the total amount he paid, in dollars, including the sales tax and the shipping fee? Show or explain how you got your answer.

d. Write an equation that expresses the relationship between *y*, the total amount paid for an item from the catalog including the sales tax and shipping fee, and *x*, the price of the item. Show or explain how you got your equation.