. Christina and Frieda want to buy the same book. Christina has $\frac{3}{4}$ of the money needed to buy the book and Frieda has half of the money needed to buy the book. If the book was $\$ 3$ cheaper, then together they would have exactly enough money to buy 2 copies of the book. What is the original price of the book?

Example 1: Write each sentence as an algebraic equation.

| Sentence | Algebraic Equation |
| :--- | :--- |
| A number increased by nine is fifteen. |  |
| Twice a number is eighteen. |  |
| Four less than a number is twenty. |  |
|  |  |
| A number divided by six is eight. |  |

Example 2: Write each sentence as an algebraic equation.

| Sentence | Algebraic Equation |
| :--- | :--- |
| Twice a number, decreased by twenty-nine, is seven. |  |
| Thirty-two is twice a number increased by eight. |  |
|  |  |
| The quotient of fifty and five more than a number is ten. |  |
| Twelve is sixteen less than four times a number. |  |

Example 3: Write each sentence as an algebraic equation.

| Sentence | Algebraic Equation |
| :--- | :--- |
| Eleni is $\mathbf{x}$ years old. In thirteen years she will be twenty-four years old. |  |
|  |  |
| Each piece of candy costs 25 cents. The price of $\mathbf{h}$ pieces of candy is <br> $\$ 2.00$. |  |
| Suzanne made a withdrawal of d dollars from her savings account. Her |  |
| old balance was $\$ 350$, and her new balance is $\$ 280$. |  |
| A large pizza pie with 15 slices is shared among $\mathbf{p}$ students so that |  |
| each student's share is 3 slices. |  |

