

Example 3

A video game club costs \$15 to join. Each game that is rented costs \$1.50. Find a rule for the linear function that describes the total cost of renting games as a member of the club, and find the total cost of renting 12 games.

The y-intercept is the cost for joining the video game club, \$15.

$$b = \underline{\hspace{2cm}}$$

The rate of change in cost is \$1.50 per game.

$$m = \underline{\hspace{2cm}}$$

The rule for the function is $\underline{\hspace{4cm}}$.

$$f(12) = 1.5(\underline{\hspace{2cm}}) + 15$$

$$= \underline{\hspace{2cm}} + 15$$

$$= \underline{\hspace{2cm}}$$

The cost renting 12 games is \$ $\underline{\hspace{2cm}}$.

✓Check It Out!

3. A book club has a membership fee of \$20. Each book purchased costs \$2. Find a rule for the linear function that describes the total cost of buying books as a member of the club, and find the total cost of buying 10 books.