Name: $\qquad$

1. Admission to the Carnival is $\$ 4$. Each game played costs an additional $\$ 2$.
a) Write a relation to show how the total cost is related to the number of games played.
b) Create a table of values to show the total cost if you play $0,2,4,6,8$, or 10 games.

| \# of <br> games | Total <br> cost |
| :--- | :--- |
| 0 | $4+2(0)=4$ |
| 2 | $4+2(2)=8$ |
| 4 | $4+2(4)=12$ |
| 6 | $4+2(6)=16$ |
| 8 | $4+2(8)=20$ |
| 10 | $4+2(10)=24$ |

c) Graph the relation.

d) Use the graph to answer these questions:
i) How much would it cost to play 5 games? $\$ 14$ for 5 games.
ii) How many games could you play for $\$ 26$ ?

$$
\begin{aligned}
& 26 \\
& -\quad 4 \\
& \hline 22 \text { left for games }
\end{aligned}
$$

