Name $\qquad$
Lesson 1.2 Worksheet
Block $\qquad$ Date $\qquad$

Identify the parent function for $h$ from its function rule. Then graph $h$ on your calculator and describe what transformation of the parent function it represents.

1. $y=\sqrt{x+4}$
2. $y=(x-4)^{3}$
3. $y=(x-6)^{2}$
4. $y=x^{3}+3$
5. $y=x-5$
6. $y=x^{2}+4$

Graph the data from the table. Describe the parent function and the transformation that best approximates the data set.

7. | $x$ | Parent <br> $y$ | $y$ |
| :---: | :---: | :---: |
| 0 |  | -6 |
| 1 |  | -5 |
| 4 |  | -4 |
| 9 |  | -3 |


8.

| $\boldsymbol{x}$ | Parent <br> $\boldsymbol{y}$ | $\boldsymbol{y}$ |
| :---: | :---: | :---: |
| -8 |  | -2 |
| -4 |  | -1 |
| 0 |  | 0 |
| 4 |  | 1 |
| 8 |  | 2 |



## Complete each problem.

9. Graph the relationship from number of tickets to total cost in dollars and identify the parent function. Use the graph to estimate the total cost of 10 tickets.

| Hockey Tickets |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Number of Tickets | 1 | 5 | 8 | 12 |
| Total Cost (\$) | 13 | 65 | 104 | 156 |

