$\qquad$

1a. Factor the quadratic equation to find the solutions:
$y=x^{2}+6 x+5$ solutions: $\qquad$ what is the $y$-intercept? $\qquad$

1b. Graph

$$
y=(x+3)^{2}-4
$$

$\qquad$ (A.O.S) $\qquad$ Is the vertex a Max or Min? $\qquad$

2.

Look at the following. State whether they are quadratic, exponential or linear. Write the rule for each function.

| x | 3 | 7 | 11 |
| :--- | :--- | :--- | :--- |
| y | 8 | 6 | 4 |


| $x$ | -1 | 0 | 1 | 2 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $y$ | .125 | .25 | .5 | 1 | 2 |


| $x$ | 0 | 1 | 2 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $y$ | 6 | 4 | 6 | 12 | 22 |

