1. 


2.

| What is the $y$-intercept? | What is the $x$-value of the vertex? | What is/are the $x$-values of the $x$-intercept(s)? |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $(0,-8)$ | $x=1$ | $x=-2 \& x=\underline{4}$ |  |  |  |  |
|  | $\operatorname{sigp}_{\operatorname{sign}} \text { of } h=+1$ |  |  |  |  |  |

3. 


4.

| What is the $y$-intercept? <br> $(0,-2)$ | What is the $x$-value of the <br> vertex? <br> $x=-1$ | What is/are the $x$-values <br> of the $x$-intercept(s)? <br> $x=-1$ | $(-1,0)$ |
| :---: | :--- | :--- | :--- |

5. 


6.

| What is the $y$ - <br> intercept? | What is the $x$-value of the <br> vertex? <br> $(0,0)$ | What is/are the $x$-values <br> of the $x$-intercept(s)? <br> $x=\underline{0} \& x=2$ |
| :--- | :--- | :--- |
| $c=+0$ |  |  |$\quad$| opp $o f b=+6$ <br> $\operatorname{sign}$ <br> $2(a)=2(3)=\underline{6}$ |
| :---: |



Using the Middle $x$ to Graph a Quadratic Answer Key

| 1. The middle $x$ is $x=2$ | 3. The middle $x$ is $x=1$ | 5. The middle $x$ is $x=-4$ |
| :--- | :--- | :--- |
| 2. The middle $x$ is $x=-1$ | 4. The middle $x$ is $x=-3$ | 6. The middle $x$ is $x=1$ |


|  |  |  | $(-1,0)$    <br> $(-2,-2)$ $(0,-2)$   <br>   $(-3,-8)$ $(1,-8)$ |
| :---: | :---: | :---: | :---: |
| 3b. |  |  |  |
| 5b. |  |  |  |

