On the same set of axes, graph the system of equations. Use the axis of symmetry to figure out the table. Remember if your axis of symmetry is a fraction/decimal, you must change your table setup on your calculator to record the exact values of your turning point. All linear equations must be written in $y=m x+b$ format to record $\mathrm{m} \& \mathrm{~b}$.

1) $y=x^{2}+4 x+2$
$a=$
$\mathrm{b}=$
$\mathrm{c}=$

Find the axis of symmetry:

2) $y=x^{2}-2 x-8$
$\mathrm{a}=$
b $=$
$\mathrm{c}=$

Find the axis of symmetry:

$y=x-8$
$\mathrm{m}=$
$b=$

Check: ( , ) ( , )
3) $y=x^{2}-5 x+6$
$\mathrm{a}=$
b =
$\mathrm{c}=$

Find the axis of symmetry:
$x-y=2$
$\mathrm{m}=$
$b=$

Check: ( , ) ( , )

$$
y=2 x+5
$$

$$
\mathrm{m}=
$$

$$
b=
$$

Check: ( , ) ( )
4) $y=x^{2}-x-4$
$\mathrm{a}=$
b $=$
$\mathrm{c}=$

Find the axis of symmetry:


$$
y=x-1
$$

$\mathrm{m}=$
$b=$
Check: ( , ) ( )
5) $y=x^{2}-3 x+2$
$\mathrm{a}=$
b $=$
$\mathrm{c}=$

Find the axis of symmetry:

| $\mathbf{x}$ | $\mathbf{y}$ |
| :---: | :---: |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

$y=2 x-2$
$\mathrm{m}=$
$\mathrm{b}=$

Check: ( , ) ( )
6) $y=-x^{2}-x+1$
$\mathrm{a}=$
b =
c =

Find the axis of symmetry:


