Name $\qquad$

1. Use the graph below to find the solutions of the quadratic equation.

2. The table below shows the values of a quadratic equation. Using the table, find the solutions (zeros):
$Y=x^{2}-2 x-15$

| $X$ | $Y$ |
| :--- | :--- |
| -4 | 9 |
| -3 | 0 |
| -2 | -7 |
| -1 | -12 |
| 0 | -15 |
| 1 | -16 |
| 2 | -15 |
| 3 | -12 |
| 4 | -7 |
| 5 | 0 |

$$
X=
$$

$\qquad$ \& $\qquad$
3. Solve the quadratic equation by graphing: $y=x^{2}+x-12$

|  |  | T | T |  |  |  | $\square{ }^{\prime \prime}$ |  | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |  | $X=\ldots$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | - ${ }^{10}$ |  | - | - |  | - |  | $\square$ |  |  |
|  | - |  |  |  |  |  | $-{ }^{9}$ |  |  | $\cdots$ | $\cdots$ | - |  | $\square$ |  |  |
|  |  |  |  |  |  |  | $\checkmark$ |  |  | $\cdots$ | $\cdots$ | - |  | $\cdots$ |  |  |
|  | - |  |  |  |  |  | $-{ }_{5}^{6}$ |  |  | - | - | - |  | $\square$ |  |  |
|  |  |  |  |  |  |  | $\checkmark 4^{4}$ |  | - | $\cdots$ | $\cdots$ | - |  | $\cdots$ |  |  |
|  |  |  |  |  |  |  | ${ }_{2}^{3}$ |  |  | - | - | - |  | $\checkmark$ |  |  |
|  |  |  |  |  |  |  | $\square^{2}$ |  |  |  |  |  |  | $\bigcirc$ |  |  |
|  | 10 | $\cdots$ | \% | ${ }^{6}$ | 5 | $4^{-3}$ | $3^{2 \cdot 1}$ |  |  | $3^{3} 4$ | 45 | 67 | 8 | ${ }^{-1011}$ |  |  |
|  | $\square$ |  |  |  |  |  | $\square \cdot{ }_{2}^{-1}$ |  |  | $\cdots$ | $\square$ |  |  | $\square$ |  |  |
|  | $3$ |  |  |  |  |  | $-{ }_{3}{ }^{2}$ |  |  | , | - |  |  | - |  |  |
|  |  |  |  |  |  |  | $\left[{ }^{-4}\right.$ |  |  |  |  |  |  | - |  |  |
|  |  |  |  |  |  |  | ${ }_{6}^{6}$ |  |  | - | - | - |  | $\checkmark$ |  |  |
|  |  |  |  |  |  |  | ${ }^{-6}$ |  |  |  |  |  |  | $\square$ |  |  |
|  |  |  |  |  |  |  | - |  |  |  |  |  |  | - |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\square$ |  |  |
|  |  |  |  |  |  |  | ${ }_{-11}^{-10}$ |  |  |  |  |  |  | $\square$ |  |  |

Solve the equations.
4. $(x+2)(x-9)=0$
5. $(2 x+3)(2 x+5)=0$
6. $(x-4)(3 x+2)=0$

Solve the equations by factoring.
7. $x^{2}-6 x-16=0$
8. $4 x^{2}+2 x-3=0$
9. $x^{2}-49=0$

