

23. $4x^2 + 12x + 9 = 0$

11. $x^2 = 2x + 35$

13. $x^2 - 8x = 0$

$3x \rightarrow 7x$

$(x + 3)(x - 7) = 0$

$x = -3, 7$

15. $x^2 + 10x = 0$

17. $x^2 = 5x$

19. $x^2 - 25 = 0$

21. $x^2 = 64$

23. $4x^2 + 12x + 9 = 0$

12. $x^2 = 6x + 27$

$(x-1)(x-4) = 0$

14. $x^2 + 7x = 0$

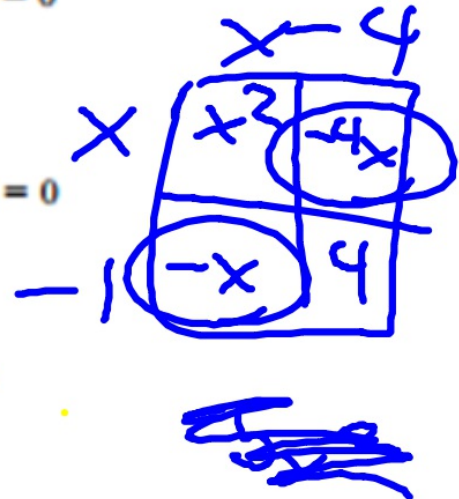
16. $x^2 - 9x = 0$

18. $4x = x^2$

20. $x^2 - 49 = 0$

22. $x^2 = 36$

24. $9x^2 - 30x + 25 = 0$



$$1. x^2 + 4x + 3 = 0$$

$$\textcircled{1} \quad x^2 + 4x + 3 = 0$$

	x^2	$3x$
x	x	3

$$(x+1)(x+3) = 0$$

$$\begin{array}{r} x+1=0 \\ -1 \quad -1 \\ \hline x=-1 \end{array}$$

$$\begin{array}{r} x+3=0 \\ -3 \quad -3 \\ \hline x=-3 \end{array}$$

18. $4x = x^2$

$$\begin{array}{r} 4x = x^2 \\ -4x \quad -4x \\ \hline 0 = x^2 - 4x \\ 0 = x(x-4) \end{array}$$

$x = 0$ $x - 4 = 0$
 $x = 4$

$$13. \underline{x^2} - \underline{8x} = 0$$

$$\underline{x} (x - 8) = 0$$

$$x = 0$$

$$\begin{array}{r} x - 8 = 0 \\ +8 \quad +8 \\ \hline x = 8 \end{array}$$

$$2x \cdot 2x = 4x^2$$

$$* \cdot 3 = 3$$

$$23. 4x^2 + 12x + 9 = 0$$

$$\begin{array}{c} 2x \\ \sim \\ \hline \end{array} \begin{array}{|c|c|} \hline 4x^2 & 12x \\ \hline 6x & 9 \\ \hline \end{array} \begin{array}{c} \\ \sim \\ \hline \end{array}$$

$$2x + 3 = 0$$

$$\begin{array}{r} -3 \\ \hline 2x = -3 \\ \sim \\ \hline \end{array}$$

$$(2x+3)(2x+3) = 0$$

$$x = -\frac{3}{2}$$

$$3. x^2 - 2x - 15 = 0$$

$$(x+3)(x-5) = 0$$

$$x = -3, 5$$

$$\begin{array}{r} x - 5 = 0 \\ + 5 \quad + 5 \\ \hline x = 5 \end{array}$$

$$\begin{array}{r} x + 3 = 0 \\ - 3 \quad - 3 \\ \hline x = -3 \end{array}$$

$$3x - 7x$$

$$7. x^2 - 4x - 21 = 0$$

$$(x+3)(x-7) = 0$$
$$x = -3, 7$$

$$\textcircled{11} \quad x^2 = 2x + 35$$

$$x^2 - 2x - 35 = 0$$

$\textcircled{6}$

$$x^2 + 14x + 48 = 0$$

$$(x+6)(x+8) = 0$$

$$x = -6, -8$$

+