$$\overline{\infty}$$

$$\Downarrow$$
 Step 8  $\Downarrow$ 

$$\left(x + \frac{b}{2a}\right)^2 = \frac{b^2}{4a^2} - \frac{4ac}{4a^2}$$

$$\left(x + \frac{b}{2a}\right)^2 = \frac{b^2 - 4ac}{4a^2}$$

[6]

$$(x + \frac{b}{2a})^2 = \frac{b^2}{4a^2} - \frac{4ac}{4a^2}$$

$$\downarrow \text{ Step 9 } \downarrow \downarrow$$

$$(x + \frac{b}{2a})^2 = \frac{b^2 - 4ac}{4a^2}$$

$$\downarrow \text{ Step 10 } \downarrow \downarrow$$

$$\downarrow \text{ Step 10 } \downarrow \downarrow$$

$$\downarrow \text{ Step 11 } \downarrow \downarrow$$

$$\downarrow \text{ Step 11 } \downarrow \downarrow$$

$$\downarrow \text{ Step 12 } \downarrow \downarrow$$

$$\downarrow \text{ Step 13 } \downarrow \downarrow$$

$$\downarrow \text{ Step 14 } \downarrow \downarrow$$

[10]

$$x + \frac{b}{2a} = \pm \sqrt{\frac{b^2 - 4ac}{4a^2}}$$

4

[11]

$$x = -\frac{b}{2a} \pm \sqrt{\frac{b^2 - 4ac}{4a^2}}$$

[12]

$$x = -\frac{b}{2a} \pm \frac{\sqrt{b^2 - 4ac}}{2a}$$

[6]

[13]

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

7

[3]

$$\left(x + \frac{b}{2a}\right)^2 = -\frac{c}{a} + \frac{b^2}{4a^2}$$

 $\mathbb{Z}$ 

$$\begin{pmatrix} x + \frac{b}{2a} \end{pmatrix} = \frac{b}{4a^2} - \frac{c}{a}$$

$$\Downarrow \text{Step 7 } \Downarrow$$

$$\begin{pmatrix} x + \frac{b}{2} \end{pmatrix}^2 = \frac{b^2}{12a^2} - \frac{4c}{a}$$

$$ax^{2} + bx + c = 0$$

$$\psi \operatorname{Step } 1 \psi$$

$$ax^{2} + bx = -c$$

$$\psi \operatorname{Step } 2 \psi$$

$$x^{2} + \frac{b}{a}x = -\frac{c}{a}$$

$$\psi \operatorname{Step } 3 \psi$$

$$x^{2} + \frac{b}{a}x + \left(\frac{b}{2a}\right)^{2} = -\frac{c}{a} + \left(\frac{b}{2a}\right)^{2}$$

$$\psi \operatorname{Step } 4 \psi$$

$$\left(x + \frac{b}{2a}\right)^{2} = -\frac{c}{a} + \left(\frac{b}{2a}\right)^{2}$$

$$\psi \operatorname{Step } 5 \psi$$

$$\left(x + \frac{b}{2a}\right)^{2} = -\frac{c}{a} + \frac{b^{2}}{4a^{2}}$$

$$\psi \operatorname{Step } 5 \psi$$

$$\left(x + \frac{b}{2a}\right)^{2} = -\frac{c}{a} + \frac{b^{2}}{4a^{2}}$$

$$\psi \operatorname{Step } 6 \psi$$

$$\left(x + \frac{b}{2a}\right)^{2} = \frac{b^{2}}{4a^{2}} - \frac{c}{a}$$

$$\psi \operatorname{Step } 7 \psi$$

$$\psi \operatorname{Step } 7 \psi$$

$$\psi \operatorname{Step } 7 \psi$$

$$\psi \operatorname{Step } 7 \psi$$