(11) $v^2+18v-88=0$

$+8 \quad +8 \quad +88$

$v^2+18v=88$

1) $\frac{18}{2}=9$

2) $9^2=81$

$v^2+18v+81=88+81$

$\sqrt{(v+9)^2}=\sqrt{169}$

$v+9=\pm 13$

$-9 \quad -9$

$v=-9\pm 13$

$-9+13=4$

$-9-13=-22$

$\{4,-22\}$

② $n^2+16n-17=0$

$+17 \quad +17$

$n^2+16n=17$

1) $\frac{16}{2}=8$

2) $8^2=64$

$n^2+16n+64=17+64$

$\sqrt{(n+8)^2}=\sqrt{81}$

$n+8=\pm 9$

$-8 \quad -8$

$n=-8\pm 9$

$-8+9=1$

$-8-9=-17$

$\{1,-17\}$

$x^2 + x - 6 = 0$

$+6 \quad +6$

$x^2 + 1x = 6$

1) $\frac{1}{2}$

2) $\left(\frac{1}{2}\right)^2 = \frac{1}{4}$

$x^2 + x + \frac{1}{4} = 6 + \frac{1}{4}$

$\sqrt{\left(x + \frac{1}{2}\right)^2} = \sqrt{\frac{25}{4}}$

$x + \frac{1}{2} = \pm \frac{5}{2}$

$-\frac{1}{2} \quad -\frac{1}{2}$

$x = -\frac{1}{2} \pm \frac{5}{2}$

$x = -\frac{1}{2} + \frac{5}{2} = \frac{4}{2} = 2$

$x = -\frac{1}{2} - \frac{5}{2} = \frac{-6}{2} = -3$

$\{2, -3\}$

$$x^2 + 3x - 6 = 0$$
$$+6 \quad +6$$

$$x^2 + 3x = 6$$

1) $\frac{3}{2}$

2) $\left(\frac{3}{2}\right)^2 = \frac{9}{4}$

$$x^2 + 3x + \frac{9}{4} = 6 + \frac{9}{4}$$

$$\sqrt{\left(x + \frac{3}{2}\right)^2} = \sqrt{\frac{33}{4}} = \frac{\sqrt{33}}{\sqrt{4}}$$

$$x + \frac{3}{2} = \frac{\pm\sqrt{33}}{2}$$
$$-\frac{3}{2} \quad -\frac{3}{2}$$

$$x = -\frac{3}{2} \pm \frac{\sqrt{33}}{2}$$

$$x^2 - 7x - 2 = 0$$
$$+2 \quad +2$$

$$x^2 - 7x = 2$$

1) $\frac{-7}{2}$

2) $\left(\frac{-7}{2}\right)^2 = \frac{49}{4}$

$$x^2 - 7x + \frac{49}{4} = 2 + \frac{49}{4}$$

$$\sqrt{\left(x - \frac{7}{2}\right)^2} = \sqrt{\frac{57}{4}}$$

$$x - \frac{7}{2} = \frac{\pm\sqrt{57}}{2}$$
$$+\frac{7}{2} \quad +\frac{7}{2}$$

$$x = \frac{7}{2} \pm \frac{\sqrt{57}}{2}$$

$x^2+5x-7=0$

$+7 \quad +7$

$x^2+5x=7$

1) $\frac{5}{2}$

2) $\left(\frac{5}{2}\right)^2=\frac{25}{4}$

$x^2+5x+\frac{25}{4}=7+\frac{25}{4}$

$\sqrt{\left(x+\frac{5}{2}\right)^2}=\sqrt{\frac{53}{4}}$

$x+\frac{5}{2}=\pm\frac{\sqrt{53}}{2}$

$-\frac{5}{2} \quad -\frac{5}{2}$

$x=-\frac{5}{2}\pm\frac{\sqrt{53}}{2}$