

$$\frac{-1}{r(a-1)} = r^c \Rightarrow ra - r = -1 \Rightarrow a = \frac{r}{-1} \Rightarrow \frac{1}{-1} m^r + m^{\frac{r}{-1}}$$

SGW/ -1

$$r(a - \epsilon m^r) \Rightarrow \epsilon m^r < \frac{r}{\epsilon} \Rightarrow \frac{r}{\epsilon} < m < \frac{r}{\epsilon}$$

$$m < 0 \Rightarrow \frac{r}{\epsilon} < m < 0$$

(2)

$$S = r \cdot P = \frac{r}{\epsilon} \Rightarrow m^r - r m + \frac{r}{\epsilon}$$

$$r \alpha^r + (s^r - \epsilon p) = r(\alpha^r + \beta^r) + (\alpha^r - \beta^r) = 1r$$

$$s^r - \epsilon p = 4\epsilon - 14m - 14 = \epsilon 1 - 14m$$

$$\Rightarrow r(\epsilon 1 - 14m) + \dots$$

$$\sqrt{s^r - \epsilon p} = \sqrt{4\epsilon - 14m - 14} = \sqrt{\epsilon r - 14m} = \epsilon \sqrt{r - m}$$

$$\Rightarrow 4\epsilon - 14m - 14 = \epsilon \sqrt{r - m} \Rightarrow 14\epsilon \sqrt{r - m} = \epsilon 1 - 14m$$

$$\Rightarrow r r - 14m = (\epsilon 1 - 14m) \sqrt{\epsilon 1 - 14m + 14m}$$

$$\alpha^r (m - r)^r + 9 \Rightarrow \epsilon a + 9 = a \Rightarrow a = -1$$

$$\Rightarrow m^r + \epsilon m$$

$$\epsilon 1 (\dots) \Rightarrow (-1, 0, 1)$$

$$-m\beta = \beta^r - r m \Rightarrow \beta^r - r m = 1$$

$$\Rightarrow m + \dots = 0 \Rightarrow m = \dots$$

$$\Rightarrow \alpha^r + \beta^r - r m \Rightarrow m^r + 14m - r m$$

$$\begin{aligned}
 & \alpha^r - \alpha + \beta = 0 \quad \alpha \beta = \frac{9\beta^2}{\alpha} \Rightarrow \alpha < +55\epsilon \\
 & \alpha \beta^r - \alpha^r + \beta = 0 \quad \Rightarrow \alpha + \beta = -r + \beta = -\frac{r}{2} \Rightarrow \beta = \frac{r}{2} \\
 & \Rightarrow \frac{1}{\alpha} + \frac{1}{\beta} = \frac{-1}{r} + \frac{2}{r} \Rightarrow \boxed{\frac{1}{\alpha} = \frac{1}{r}}
 \end{aligned}$$

$$\begin{aligned}
 \alpha^r &= -m\alpha + rm \Rightarrow \alpha^r - m\beta = -m\alpha + rm - m \\
 &= -m(\alpha + \beta) + rm = m^r + rm = \lambda \Rightarrow m^r + rm - \lambda = 0 \\
 & \quad \begin{matrix} m = -3 \\ m = 0 \end{matrix} \\
 & \quad \boxed{3} \quad \boxed{-3}
 \end{aligned}$$

$$\begin{aligned}
 \text{في } y_5 & \Rightarrow m^r - rm - \lambda = 0 \quad \begin{matrix} m = 3 \\ m = -3 \end{matrix} \\
 m < 0 & \Rightarrow m = -3 \Rightarrow -r m^r + r m + \lambda = 0 \Rightarrow \lambda = 9 \\
 & \quad \text{في } y_5 \text{ في } \lambda = 9
 \end{aligned}$$

$$\begin{aligned}
 y &= a(0 - r)^r + b = 9 \Rightarrow a = -\frac{1}{r} \\
 \Rightarrow -\frac{1}{r} m^r + r m + 9 & \Rightarrow \frac{5}{r} = \frac{a}{-1} = \frac{1}{r}
 \end{aligned}$$

$$\begin{aligned}
 m = r & \Rightarrow r a^r - r a - 10 = 9 \quad \begin{matrix} m = 1 \\ m = -1 \end{matrix} \\
 \Delta < 0 & \quad \checkmark \\
 S &= -\frac{b}{a} = \frac{\Delta}{r} \\
 r + r &= \frac{\Delta}{r} \Rightarrow r = \frac{r}{2}
 \end{aligned}$$