【1d2b3】$\exists z\in\mathbb{R}$; $z=r(t)-\mathrm{Q}\,m(2,1)/\mathrm{E}$ and

$$t=2nt_0+\frac{1}{3\beta^2}(\beta z-c)\sqrt{2\beta z+c}$$

$$\text{and}\quad \theta(t)=\theta_0(n)+\frac{h}{\sqrt{\alpha'}}\cosh^{-1}\left(\frac{\alpha'/r(t)+\beta'}{\sqrt{\beta'^2-\alpha'\mathrm{A}}}\right)$$

【1d3】とは【1d3a】and【1d3b】のことだ。

【1d3a】$-\mathrm{Z}_0-am(1,1)<\mathrm{Q}\,m(2,1)<-\mathrm{Z}_0$

【1d3b】$\exists t_0\in\mathbb{R}$; $\exists\theta_0\in\mathbb{R}(\mathbb{Z})$;【1d3b1】and

［$\forall t\in\mathbb{R}$; $\forall n\in\mathbb{Z}$; $-t_0\leqq t-2nt_0\leqq 0\Rightarrow$【1d3b2】］

and［$\forall t\in\mathbb{R}$; $\forall n\in\mathbb{Z}$; $0\leqq t-2nt_0\leqq t_0\Rightarrow$【1d3b3】］

【1d3b1】$t_0=\dfrac{\sqrt{\alpha'}}{-\alpha\mathrm{E}}+\dfrac{\beta}{\alpha\sqrt{-\alpha}}\cos^{-1}\left(\dfrac{-\alpha\beta'/\mathrm{A}}{\sqrt{\beta^2-\alpha c}}\right)$ and $\theta_0(0)=0$

【1d3b2】$\exists z\in\mathbb{R}$; $z=r(t)-\mathrm{Q}\,m(2,1)/\mathrm{E}$ and

$$t=2nt_0-\frac{1}{\alpha}\sqrt{\alpha z^2+2\beta z+c}-\frac{\beta}{\alpha\sqrt{-\alpha}}\cos^{-1}\left(\frac{-\alpha z-\beta}{\sqrt{\beta^2-\alpha c}}\right)$$

$$\text{and}\quad \theta(t)=\theta_0(n)-\frac{h}{\sqrt{\alpha'}}\cosh^{-1}\left(\frac{\alpha'/r(t)+\beta'}{\sqrt{\beta'^2-\alpha'\mathrm{A}}}\right)$$

【1d3b3】$\exists z\in\mathbb{R}$; $z=r(t)-\mathrm{Q}\,m(2,1)/\mathrm{E}$ and

$$t=2nt_0+\frac{1}{\alpha}\sqrt{\alpha z^2+2\beta z+c}+\frac{\beta}{\alpha\sqrt{-\alpha}}\cos^{-1}\left(\frac{-\alpha z-\beta}{\sqrt{\beta^2-\alpha c}}\right)$$

$$\text{and}\quad \theta(t)=\theta_0(n)+\frac{h}{\sqrt{\alpha'}}\cosh^{-1}\left(\frac{\alpha'/r(t)+\beta'}{\sqrt{\beta'^2-\alpha'\mathrm{A}}}\right)$$

【1d4】とは【1d4a】and【1d4b】のことだ。

【1d4a】$-\mathrm{Z}_0<\mathrm{Q}\,m(2,1)<-ab\,\mathrm{Z}_0$

【1d4b】$\exists t_0\in\mathbb{R}$; $\exists\theta_0\in\mathbb{R}(\mathbb{Z})$;【1d4b1】and

［$\forall t\in\mathbb{R}$; $\forall n\in\mathbb{Z}$; $-t_0\leqq t-2nt_0\leqq 0\Rightarrow$【1d4b2】］

and［$\forall t\in\mathbb{R}$; $\forall n\in\mathbb{Z}$; $0\leqq t-2nt_0\leqq t_0\Rightarrow$【1d4b3】］