$$
\begin{align}
(a+b)^3 &= (a+b)(a+b)^2 \tag{1}\\
&= (a+b)(a^2+2ab+b^2) \tag{2}\\
&= a^3+3a^2b+3ab^2+b^3 \tag{3}
\end{align}
$$

$$
\begin{align}
x^2+y^2 &= 1 \tag{4}\\
x &= \sqrt{1-y^2} \tag{5}
\end{align}
$$

This example has two column-pairs.

$$
\begin{align}
\text{Compare } x^2+y^2 &= 1 & x^3+y^3 &= 1 \tag{6}\\
x &= \sqrt{1-y^2} & x &= \sqrt[3]{1-y^3} \tag{7}
\end{align}
$$

This example has three column-pairs.

$$
\begin{align}
x &= y & X &= Y & a &= b+c \tag{8}\\
x' &= y' & X' &= Y' & a' &= b \tag{9}\\
x+x' &= y+y' & X+X' &= Y+Y' & a'b &= c'b \tag{10}
\end{align}
$$

This example has two column-pairs.

$$
\begin{flalign}
\text{Compare } x^2+y^2 &= 1 & x^3+y^3 &= 1 \tag{11}\\
x &= \sqrt{1-y^2} & x &= \sqrt[3]{1-y^3} \tag{12}
\end{flalign}
$$

This example has three column-pairs.

$$
\begin{flalign}
x &= y & X &= Y & a &= b+c \tag{13}\\
x' &= y' & X' &= Y' & a' &= b \tag{14}\\
x+x' &= y+y' & X+X' &= Y+Y' & a'b &= c'b \tag{15}
\end{flalign}
$$

This example has two column-pairs.

$$
\begin{align}
\text{Compare } x^2+y^2 &= 1 & x^3+y^3 &= 1 \tag{16}\\
x &= \sqrt{1-y^2} & x &= \sqrt[3]{1-y^3} \tag{17}
\end{align}
$$

This example has three column-pairs.

$$
\begin{flalign}
x &= y & X &= Y & a &= b+c \tag{18}\\
x' &= y' & X' &= Y' & a' &= b \tag{19}\\
x+x' &= y+y' & X+X' &= Y+Y' & a'b &= c'b \tag{20}
\end{flalign}
$$

$$
\begin{align}
x &= y && \text{by hypothesis} \tag{21}\\
x' &= y' && \text{by definition} \tag{22}\\
x+x' &= y+y' && \text{by Axiom 1} \tag{23}
\end{align}
$$

$$
\begin{aligned}
x^2 + y^2 &= 1 \\
x &= \sqrt{1-y^2} \\
\text{and also } y &= \sqrt{1-x^2}
\end{aligned}
\qquad
\begin{aligned}
(a+b)^2 &= a^2 + 2ab + b^2 \\
(a+b)\cdot(a-b) &= a^2 - b^2
\end{aligned}
\tag{24}
$$

$$
\begin{aligned}
x^2 + y^2 &= 1 \\
x &= \sqrt{1-y^2} \\
\text{and also } y &= \sqrt{1-x^2}
\end{aligned}
\qquad
\begin{aligned}[t]
(a+b)^2 &= a^2 + 2ab + b^2 \\
(a+b)\cdot(a-b) &= a^2 - b^2
\end{aligned}
\tag{25}
$$

$$
\left.\begin{aligned}
B' &= -\partial \times E \\
E' &= \partial \times B - 4\pi j
\end{aligned}\right\} \quad \text{Maxwell's equations}
$$

$$
\begin{aligned}
V_j &= v_j & X_i &= x_i - q_i x_j & &= u_j + \sum_{i \neq j} q_i \\
V_i &= v_i - q_i v_j & X_j &= x_j & U_i &= u_i
\end{aligned}
\tag{26}
$$

$$
\left.\begin{aligned}
a &\perp \alpha \\
b &\perp \alpha
\end{aligned}\right\} \Rightarrow a \parallel b
\tag{27}
$$

$$
A_1 = N_0(\lambda; \Omega') - \phi(\lambda; \Omega') \tag{28}
$$

$$
A_2 = \phi(\lambda; \Omega')\phi(\lambda; \Omega) \tag{29}
$$

and finally

$$
A_3 = \mathcal{N}(\lambda; \omega) \tag{30}
$$

$$
C = \sqrt{R^2 - x^2} \qquad \text{fromljm} \tag{31}
$$

$$
dy = \left(2 \cdot \sqrt{R^2 - x^2}\right)^2 dx \qquad \text{from} \tag{32}
$$

$$
V = \int_{-R}^{R} \left(2 \cdot \sqrt{R^2 - x^2}\right)^2 dx \tag{33}
$$

$$
R = 2 \tag{34}
$$

$$
V = \frac{128}{3} \tag{35}
$$