so in line n+1 meets m.

So E,n+1 have 4 points.

and one line that p II to L.

Lines through P to each other.

E not on L.

Say E x, y, z in points.

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(!) x

(!) x

(!)

E x, y, z in line outside.

E, n+1 parallel class.

E in line parallel class.

E in point.

Every point lies on n+1 line.

E not line lies in points.

In any finite affine plane \( E \), \( E \) is finite, \( n \geq 2 \) so that
If \( F \not\in G \) not here, then \( E \not\in F \) also.

Find \( P \), \( E \) not here.

(Continued from previous page)

Take \( F \) as \( A \) +1 line on \( E \) so \( P_1 \) is in \( A \).

Let \( l \) + \( A \) be a straight line.

\( l \) is in \( P_1 \) on \( E \) in \( B \).

If \( P \) is \( \not\in F \), then \( P \) is on \( F \).

If \( P \not\in E \), then \( P \) is not on \( E \).

If \( P \not\in G \), then \( P \not\in F \).

\( A \) +1 line on \( P \) at \( B \), \( E \), \( F \).
So \( n \) is an integer.

Have a chosen \( p \), \( q \), and \( r + 1 \) classes such that

\[
\begin{aligned}
&\text{Have a chosen } p, q, \text{ and } r + 1 \text{ classes such that} \\
&\text{so that } \frac{n}{q} + 1 \text{ otherwise.} \\
\end{aligned}
\]

Since every \( p \) is in each class, \( n \) divides \( p \). Hence \( n + 1 \) must also divide \( p + 1 \).

Any such \( p \) has \( n + 1 \) terms therefor. \( E \) has \( n + 1 \) parallel classes. So \( E \) has a unique.

I choose \( p \) to have a unique.

Each line in \( L \) has a parallel class.

Let \( E \) be a parallel class.
Any 2 PES in \( \Pi \) are on a unique line:

\[
\text{Line is: } n_2 + (n+1) + 1.
\]

The line is: \( n_2 + (n+1) + 1 \).

\[\text{Line: } n_2 + (n+1) + 1.\]

Lies: arranged like \( \phi \) & other, 3rd, C1, C2, C3, C4, etc. (11 times).

\( \phi \) : Pr: These of \( \phi \) and C1, C2, C3, C4, etc.

If \( \phi \) exists, then \( \phi \) in \#10.

\( \phi \) is unique if \#10 with \( \phi = \#10 \).

Thus, prove \( \phi \).

7.8.4.

12 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100
Any 2 lines meet in unique pt.

If 3 pts, no 3 collinear.

If 4 pts, no 3 collinear.

C1, C2, X, Z are no 3 collinear.

In k have 3 noncollinear pts. X
Def. A subplane $\Pi'$ of a fpp $\Pi$ is a proj. plane whose pts are subsets of pts of $\Pi$ and lines "lines of $\Pi$.

(Ex: order 2 inside order 4).

Theorem (Bruck, 1963) If $\Pi'$ is a subplane of fpp $\Pi$ and if orders are $m$ and $n$, then $n = m^2$ or $m^2 + m \leq n$.

\[ \text{Diagram:} \]