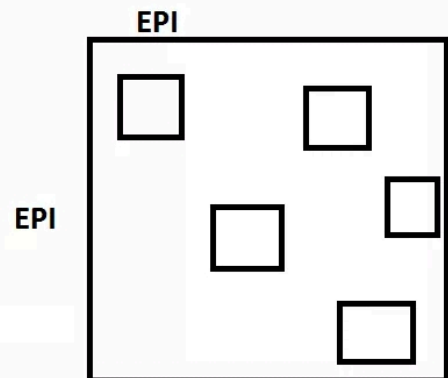# Threads/Inch in the Cloth or Fabric Count
# Thread Density
# Sett (Woven)

**For Woven Fabric: In Warp, EPI**
**In Weft, PPI**

**For Knit Fabric:** wpi, cpi

## Determination of Threads per inch

1. Use of Counting Glass ( Pick Glass)
2. Traversing Thread Counter
3. Fabric Dissection (Unravelling the cloth)
4. Parallel Line Grating
5. Tapper Line Grating

**Method of Using Counting Glass**

- Powerful Light Source and Table
- 5 Different palces has to be checked (Should not be same thread twice)
- Should avoid Selvedge

=> If the thread/inch is fewer than 25, No. of thread per 3 inch is taken and then divide the value by 3

=> If the fabric is less than 3", then Total threads has to be counted and then divide by the fabric width.

=> For Pile fabrics, Ground and pile has to be checked saperately

=> Denotaion should be 100 × 80. Should not be like 8,000

**Problem 01:**

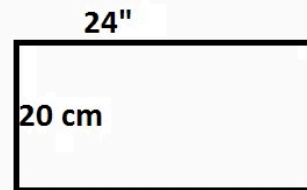Here, Length in Fabric, P = 5000 m
Straightened Lenght, L = ?
Crimp, C = 3%

We Know, $C = \dfrac{L - P}{P} * 100\%$

$\Rightarrow L = CP/100\% + P$

$= (3\% * 5000m\ /\ 100\%) + 5000m$
$= 5150\ m$  (Ans)

**Problem 02:**   Do

24"

20 cm

**Problem 03 :**

1500 yards = 1500 * 36 inch = 54000 inch

Total No. of Picks =  54000 * 90
$\qquad\qquad\qquad = 4860000$

1500 yards

Straightended length of
each picks = $\dfrac{6\% * 56\ inch}{100\%}$ + 56 inch

$= 59.36$ inch
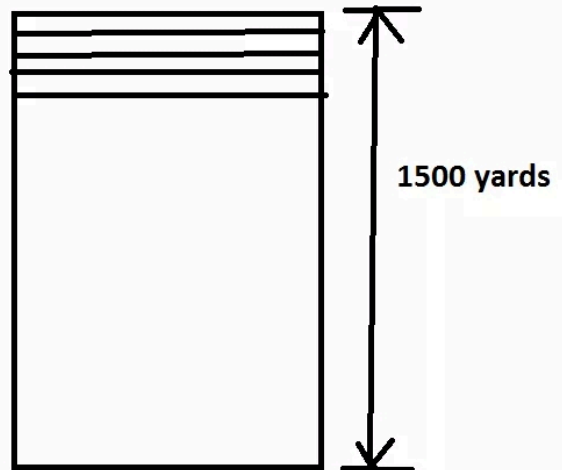
Total length of weft yarn = 4860000 * 59.36 * (1/36)   yards
$\qquad\qquad\qquad\qquad = 8013600$ yards

Total weight of weft yarn = $\dfrac{8013600}{840 * 18}$   lb

$= 530$ lb

No. of cones = 530/1.5    = 353.33

= 354 (round up)

No. of cones
$\qquad$ 354   (Ans)