

Question: 1

Given:

Floors = 27

each floor offices = 37

Solution

How many offices in building = ?

Using Product Rule

offices in building =  $27 \times 37$

offices in building = 999 offices

Q No: 02

Solution

Given: Color = 12

version = 2

sizes = 3

Using Product Rule

different types of shirts =  $12 \times 2 \times 3$

Shirts = 72 Shirts are made.

Q No: 03

Solution

Given:

Airlines From New York To Denver = 6

From Denver to San Francisco = 7  
Pairs of Airlines = ?

Using Product Rule

Pairs of Airlines =  $6 \times 7$

$$\boxed{\text{Pair of Airlines} = 42}$$

Q No: 04

number of Employees =  $N = ?$

Given:

$$n = 10$$

$$k = 6$$

by Pigeonhole Principle

$$N = k(n-1) + 1$$

$$N = 6(10-1) + 1$$



$$N = 6(9) + 1$$

$$N = 55$$

Q No: 05

Given:

$$N = 90$$

$$r = 4$$

$$K = ?$$

using Pigeon Principle

$$N = K(r-1) + 1$$

$$K = \frac{N-1}{r-1}$$

$$K = \frac{90-1}{4-1}$$

$$K = \frac{89}{3}$$

$$K = 29.66$$