Nama : Andri Firman Saputra Matematika Diskrit

NIM; 20101140212 5 Pertemuan 12

1. $4 \times 3 \times 2 = 24$ bilangan

2. S = 2 huruf
   T = 3 huruf
   A = 1 huruf
   I = 2 huruf
   K = 1 huruf

   Total = 9 huruf

$$P = \frac{9!}{2!3!1!2!1!} = \frac{9 \times 8 \times 7 \times 6 \times 5 \times 4 \times 3!}{2 \times 1 \times 3! \times 1 \times 2 \times 1 \times 1} = \frac{60.480}{4} = 15.120 \text{ cara}$$

3. $P_{siklis} = (n-1)!$

   $n = 7$

$$P_{siklis} = (7-1)! = 6! = 6 \times 5 \times 4 \times 3 \times 2 \times 1 = 720$$

4. 2 calon
   $n = 10$

$$P = \frac{10!}{2! \times 8!} = \frac{10 \times 9 \times 8!}{8! \times 2 \times 1} = \frac{10 \times 9}{2} = 45 \text{ susunan}$$

5. Banyak cara $= 5C2 \times 6C3 \times 7C4$

$$= \frac{5!}{2!(5-2)!} \times \frac{6!}{3!(6-3)!} \times \frac{7!}{4!(7-3)!} = \frac{5 \times 4 \times 3!}{2 \times 3!} \times \frac{6 \times 5 \times 4 \times 3!}{3! \; 3 \times 2 \times 1} \times \frac{7 \times 6 \times 5 \times 4!}{4! \times 4 \times 3 \times 2 \times 1}$$

$= 10 \times 20 \times 8,75$

$= 1750$ cara

No.

Date

6. $24C2 = \frac{24!}{2!(24-2)!} = \frac{24 \times 23 \times 22!}{2 \times 1 \times 22!} = 276$

7. 0 sampai 5 = 6 pilihan dan 3 angka
$6 \times 6 \times 6 = 216$ kombinasi