

The Subgroups of S_4 in Cycle Form

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```
*****BEGIN GroupSet - Size=30 *****
```

```
-----Begin Group, Size=1-----
```

```
I
```

```
-----End Group, Size=1-----
```

```
-----Begin Group, Size=2-----
```

```
I
```

```
(2,3)
```

```
-----End Group, Size=2-----
```

```
-----Begin Group, Size=2-----
```

```
I
```

```
(1,2)
```

```
-----End Group, Size=2-----
```

```
-----Begin Group, Size=2-----
```

```
I
```

```
(1,3)
```

```
-----End Group, Size=2-----
```

```
-----Begin Group, Size=2-----
```

```
I
```

```
(0,1)
```

```
-----End Group, Size=2-----
```

```
-----Begin Group, Size=2-----
```

```
I
```

```
(0,1)(2,3)
```

```
-----End Group, Size=2-----
```

```
-----Begin Group, Size=2-----
```

```
I
```

```
(0,2)
```

```
-----End Group, Size=2-----
```

```
-----Begin Group, Size=2-----
```

```
I
(0,2)(1,3)
-----End Group, Size=2-----

-----Begin Group, Size=2-----
I
(0,3)
-----End Group, Size=2-----

-----Begin Group, Size=2-----
I
(0,3)(1,2)
-----End Group, Size=2-----

-----Begin Group, Size=3-----
I
(1,2,3)
(1,3,2)
-----End Group, Size=3-----

-----Begin Group, Size=3-----
I
(0,1,2)
(0,2,1)
-----End Group, Size=3-----

-----Begin Group, Size=3-----
I
(0,1,3)
(0,3,1)
-----End Group, Size=3-----

-----Begin Group, Size=3-----
I
(0,2,3)
(0,3,2)
-----End Group, Size=3-----

-----Begin Group, Size=4-----
I
(2,3)
(0,1)
(0,1)(2,3)
-----End Group, Size=4-----

-----Begin Group, Size=4-----
I
(1,2)
(0,3)
```

(0,3)(1,2)
-----End Group, Size=4-----

-----Begin Group, Size=4-----
I
(1,3)
(0,2)
(0,2)(1,3)
-----End Group, Size=4-----

-----Begin Group, Size=4-----
I
(0,1)(2,3)
(0,2)(1,3)
(0,3)(1,2)
-----End Group, Size=4-----

-----Begin Group, Size=4-----
I
(0,1)(2,3)
(0,2,1,3)
(0,3,1,2)
-----End Group, Size=4-----

-----Begin Group, Size=4-----
I
(0,1,2,3)
(0,2)(1,3)
(0,3,2,1)
-----End Group, Size=4-----

-----Begin Group, Size=4-----
I
(0,1,3,2)
(0,2,3,1)
(0,3)(1,2)
-----End Group, Size=4-----

-----Begin Group, Size=6-----
I
(2,3)
(1,2)
(1,2,3)
(1,3,2)
(1,3)
-----End Group, Size=6-----

-----Begin Group, Size=6-----
I
(2,3)

(0,2)
(0,2,3)
(0,3,2)
(0,3)
-----End Group, Size=6-----

-----Begin Group, Size=6-----
I
(1,2)
(0,1)
(0,1,2)
(0,2,1)
(0,2)
-----End Group, Size=6-----

-----Begin Group, Size=6-----
I
(1,3)
(0,1)
(0,1,3)
(0,3,1)
(0,3)
-----End Group, Size=6-----

-----Begin Group, Size=8-----
I
(2,3)
(0,1)
(0,1)(2,3)
(0,2)(1,3)
(0,2,1,3)
(0,3,1,2)
(0,3)(1,2)
-----End Group, Size=8-----

-----Begin Group, Size=8-----
I
(1,2)
(0,1)(2,3)
(0,1,3,2)
(0,2,3,1)
(0,2)(1,3)
(0,3)
(0,3)(1,2)
-----End Group, Size=8-----

-----Begin Group, Size=8-----
I
(1,3)
(0,1)(2,3)
(0,1,2,3)
(0,2)

(0,2)(1,3)
(0,3,2,1)
(0,3)(1,2)
-----End Group, Size=8-----

-----Begin Group, Size=12-----
I
(1,2,3)
(1,3,2)
(0,1)(2,3)
(0,1,2)
(0,1,3)
(0,2,1)
(0,2,3)
(0,2)(1,3)
(0,3,1)
(0,3,2)
(0,3)(1,2)
-----End Group, Size=12-----

-----Begin Group, Size=24-----
I
(2,3)
(1,2)
(1,2,3)
(1,3,2)
(1,3)
(0,1)
(0,1)(2,3)
(0,1,2)
(0,1,2,3)
(0,1,3,2)
(0,1,3)
(0,2,1)
(0,2,3,1)
(0,2)
(0,2,3)
(0,2)(1,3)
(0,2,1,3)
(0,3,2,1)
(0,3,1)
(0,3,2)
(0,3)
(0,3,1,2)
(0,3)(1,2)
-----End Group, Size=24-----

*****END GroupSet - Size=30 *****