MA320 抽象代数 作业八

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Ex. 2.10/1

$$G_1 = \{(1), (3\ 4)\}$$
$$G_2 = \{(1), (3\ 4)\}$$
$$G_3 = \{(1), (1\ 2)\}$$
$$G_4 = \{(1), (1\ 2)\}$$

Ex. 2.10/2

$$e \times gH = (eg)H = gH$$
$$s \times (t \times gH) = s \times (tg)H = (stg)H = (st)gH = st \times gH$$

故 G/H 是一个 $G-$ 集，轨道公式为 $s = [G : H]$

Ex. 2.10/5

Ex. 2.10/6

$$D_6 = \{\phi, \tau, \sigma, \sigma\tau, \sigma^2, \sigma^2\tau, \sigma^3, \sigma^3\tau, \sigma^4, \sigma^4\tau, \sigma^5, \sigma^5\tau\}$$
$$\sigma = (1\ 2\ 3\ 4\ 5\ 6)$$
$$\tau = (2\ 6)(3\ 5)$$