

8.1.1(a)

$$35^7$$

8.1.1(c)

$$26^3 + 35^4$$

8.1.2(b)

$$40^7 + 40^8 + 40^9$$

8.2.3(a)

$$B^9 = 2^9 = 512$$

$$E_{10} = 2^{10}/2 = 512$$

$$|B^9| = |E_{10}|$$

The set E_n 's cardinality is equal to the cardinality of B^n divided by two

8.2.5(c)

Yes, $k=2$

For Every $f(x)$ there is the set x that has Don ahead of Gene and a set x that had Gene ahead of Don

8.2.5(d)

$$|T| = 1814400$$

8.3.3(a)

$$10^3 * 26^4$$

8.4.1(c)

$$7^5$$

8.4.1(d)

$$2520$$

8.4.3(b)

$$9! * 2$$

8.5.2(c)

$$35$$

8.5.2(d)

$$70$$

8.5.4(b)

$$2376$$

8.5.7(b)

$$C(8,3) * C(6,2)$$

$$8.6.4(a) \\ C(100,9)$$

$$8.7.3(a) \\ 254$$

$$8.7.4(a) \\ 2,903,040$$

$$8.8.4(b) \\ 305,540,235,000$$

$$8.8.6(a) \\ C(100,35) * C(65,20) * C(45,25) * C(20,20)$$

$$8.9.2(b) \\ 6188$$

$$8.10.2(b) \\ 52,521,875$$

$$8.11.2(c) \\ 638$$

$$8.12.20(c) \\ 48$$

$$8.12.20(d) \\ 720$$

$$8.12.24(a) \\ C(42,5)$$