9.1.3(d)

{2,4,5,6,11,13,14}

9.1.3(e)

{7,9,10,11,12,13,14}

9.2.1(c)

C(8,5)35(-4)3

9.2.2(a)

(3 - 1)k

9.3.3(a)

28 shirts

9.3.4(a)

suppose you have a set *n* that is {1,2,…,13,14}

suppose you have set *m* that is a subset of *n*

suppose |*m*| = 8

the halfway point of the set *n*  is 7

Since the integer 8 is greater than 7 then |*m*| is greater than the halfway point of the set *n*

therefore, there has to be an integer in the set *m* that is greater than 7, therefore there must be an integer in the set *m* that is equal to or greater than 8.

Let k = 8 and let j = 7

if *m* is the smallest set in *n* then the numbers 8 and 7 are in the set *m* and therefore k+j = 15

Since 8 +1 = 9 and 7-1 = 6 and 9 + 6 = 15, then (k+1) + (j-1) = 15

Therefore there must be two numbers in the set *m* that add up to 15.