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)
$C(8,5)3^5(-4)^3$

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.