NAME:\_\_\_\_\_

DATE\_\_\_\_\_

## **Problem Solving Venn Diagrams**

## Question 2:

A business firm has 144 employees. 39 have Master's Degrees, 84 have a Bachelor's Degree, 42 have neither a Master's nor a Bachelor's degree. Some have both a Master's and a Bachelor's degree.

Evaluate a) The number of employees with both a Master's and a Bachelor's degree?

b) The number of employees with only a Bachelor's.

Solution: Fill in the spaces with the information given.

No. of employees,  $U = ____$ 

No. of employees with a Master's, **n(M) =** \_\_\_\_\_

No. of employees with a Bachelor's, n(B)= \_\_\_\_\_

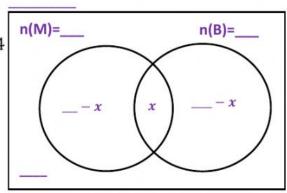
No. of employees with both,  $n(M \cap B) = x$ 

No. of employees with none = \_\_\_\_\_

 $U = 
_{-x + x + - - x + 42} = 144
_{+ - + - - x} = 144
_{-x + - x} = 144$ 

$$n = \underline{\hspace{1cm}} - \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$
 employees

a) n(M \_\_\_ B) = \_\_\_\_ employees



**b)** n (B only) = \_\_\_\_\_ employees