Coursework Question #2

A Sports Club has 300 athletes. 175 of them are track competitors, 98 are field competitors, 52 are neither track nor field. Some are both track and field competitors.

Find a) The number of athletes who are both track and field.

b) The number of athletes who are track only

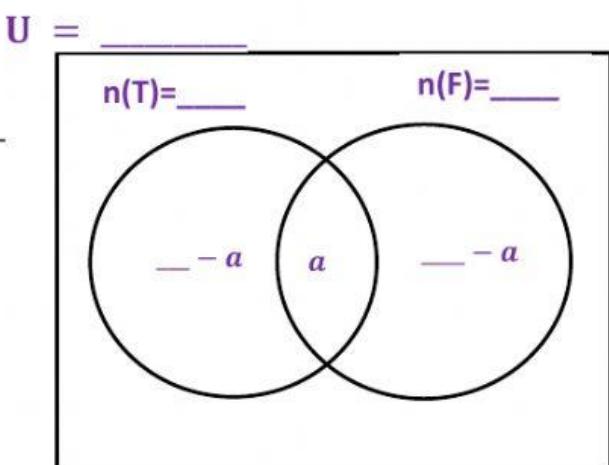**Solution: Fill in the spaces with the information given.**

Given U = _____ athletes

No. of Track competitors, **n(T) =** ____

No. of Field competitors, **n(F)=** ____

No. of competitors of neither Track nor Field, **n (T U F)'=**____

No. of competitors of both Track and Field, **n(T ∩F)= a**

$$U = \underline{\hspace{2cm}}$$

$$\underline{\hspace{1cm}} - a + a + \underline{\hspace{0.8cm}} - a + \underline{\hspace{0.8cm}} = \underline{\hspace{1cm}}$$

$$\underline{\hspace{1cm}} + \underline{\hspace{1cm}} + \underline{\hspace{1cm}} - a = \underline{\hspace{1cm}}$$

$$\underline{\hspace{1.5cm}} - a = \underline{\hspace{1.5cm}}$$

$$a = \underline{\hspace{1cm}} - \underline{\hspace{1.5cm}} = \underline{\hspace{1.5cm}}$$

n(T)=____   n(F)=____

__ − a a __ − a

a) n(T ∩ F) = ____ athletes

b) n (Track only) = _____ − _____ = _____ athletes