

NAME: _____ DATE: _____

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, $n(T \cup F)' =$ _____

No. of competitors of both Track and Field, $n(T \cap F) = a$

$$\text{_____} - a + a + \text{_____} - a + \text{_____} = \text{_____}$$

$$\text{_____} + \text{_____} + \text{_____} - a = \text{_____}$$

$$\text{_____} - a = \text{_____}$$

$$a = \text{_____} - \text{_____} = \text{_____}$$

a) $n(T \cap F) =$ _____ athletes

b) $n(\text{Track only}) = \text{_____} - \text{_____} = \text{_____}$ athletes

$U =$ _____

