

16th June



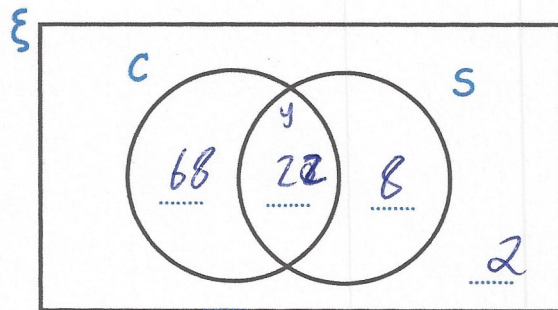
$\xi = 100$ farmers
 $C =$ farmers that keep cattle
 $S =$ farmers that keep sheep

76 farmers keep only cattle or only sheep.

$\frac{2}{19}$ of these 76 farmers only keep sheep

The number of farmers that keep cattle is three times the number that keep sheep.

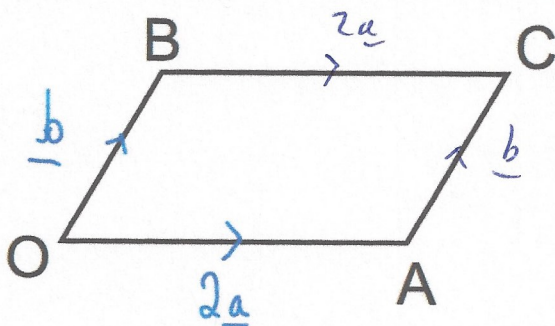
Complete the Venn Diagram



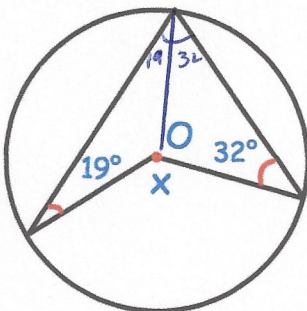
$$\begin{aligned} 3(y+8) &= y+68 \\ 3y+24 &= y+68 \\ 2y &= 44 \\ y &= 22 \end{aligned}$$

Make a the subject

$$\begin{aligned} 8a + 3c &= ab + 13c \\ 8a - ab &= 10c \\ a(8-b) &= 10c \\ a &= \frac{10c}{8-b} \end{aligned}$$



$$\begin{aligned} \vec{OC} &= 2\underline{a} + \underline{b} \\ \vec{AB} &= -2\underline{a} + \underline{b} \end{aligned}$$



Find x

$$\begin{aligned} 19 + 32 &= 51^\circ \\ x &= 102^\circ \end{aligned}$$