

A Survey of 270 students found the following:

→ 64 like sprouts ← S

→ 94 like broccoli ← B

→ 58 like cauliflower ← C

→ 26 like sprouts and broccoli

→ 28 like sprouts and cauliflower

→ 22 like broccoli and cauliflower

→ 14 like all 3 vegetables

How many of the 270 do not like any of these 3 vegetables?

$$|S| = 64$$

$$|B| = 94$$

$$|C| = 58$$

$$|S \cap B| = 26$$

$$|S \cap C| = 28$$

$$|B \cap C| = 22$$

$$|S \cap B \cap C| = 14$$

$$|S \cup B \cup C| = |S| + |B| + |C| - |S \cap B| - |S \cap C| - |B \cap C| + |S \cap B \cap C|$$

$$= 64 + 94 + 58 - 26 - 28 - 22 + 14$$

$$= 154 = \text{\# students who like at least one of the 3 veggies.}$$

$$\Rightarrow \text{Answer} = 270 - 154 = \boxed{116 \text{ students}}$$