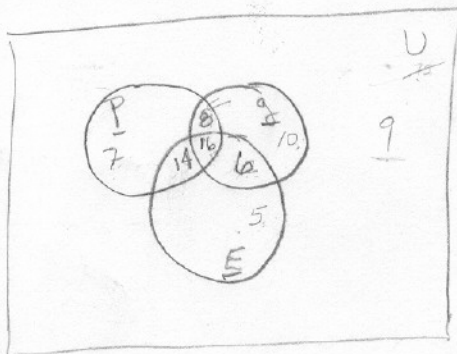


Example 2 In a certain group of 75 students, 16 students are taking psychology, geology, and English; 24 students are taking psychology and geology; 30 students are taking psychology and English; and 22 students are taking geology and English. However, 7 students are only taking psychology, 10 students are taking only geology, and 5 students are taking only English.

- How many of these students are taking psychology? **45**
- How many of these students are taking psychology and English, but not geology? **14**
- How many students in this group are not taking any of these three subjects? **9**



Example 3 At a meeting of 50 car dealers, the following information was obtained; 12 dealers sold Buicks, 15 dealers sold Toyotas, 16 dealers sold Pontiacs, 4 dealers sold both Buicks and Toyotas, 6 dealers sold both Toyotas and Pontiacs, 5 dealers sold both Buicks and Pontiacs, and one dealer sold all three brands.

- How many dealers sold Buicks and neither of the other two brands? **4**
- How many of the dealers at the meeting did not sell any of these brands of cars? **21**

