

Classifying and Representing Data

Data Collection

Tyler uses a stratified sample to survey 25% of the members of his swimming club. He uses their sex as a category and selects a random group of female and male swimmers. There are 88 female swimmers and 112 male swimmers in his club.

- a How many swimmers are in the entire population?
- b How many female swimmers are in the sample?
- c How many male swimmers are in the sample?

Osman uses a stratified sample to survey 7.5% of his chat room friends. He uses marital status as a category and selects a random group of married and unmarried friends. There are 200 married and 240 unmarried friends in his chat room.

- a How many friends are in the entire population?
- b How many married friends are in the sample?
- c How many unmarried friends are in the sample?

Taylia uses a stratified sample to survey 20% of the senior students from her school. There are 205 Year 11 students and 180 Year 12 students. How many students should Taylia choose from Year 12?

Ming uses a stratified sample to survey $12\frac{1}{2}\%$ of the junior students from his school. There are 88 Year 7, 120 Year 8, 104 Year 9 and 128 Year 10 students.

- a How many students are in the entire population?
- b How many students should Ming choose in following years?

i Year 7

ii Year 8

iii Year 9

iv Year 10