Solution to Question 1

Males: (Singaporeans, Chinese)

Females:

11 units = 400 − 70 = 330
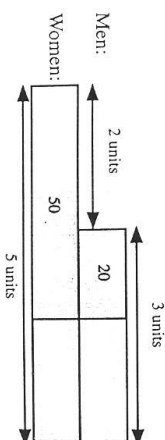1 unit = 30

(a) Number of students who were Singaporeans = 5 × 30 = 150.
(b) Number of Chinese students = 6 × 30 = 180.

Fraction of participants who were Chinese students = $\dfrac{180}{400} = \dfrac{9}{20}$.
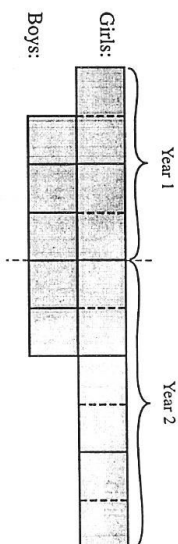
Solution to Question 2

Artistes 60 | Entrepreneurs | Sportsmen
50% of all | 50% of all | 10% of all

1 unit = 10% of all the interviewees
5 units = 50% of all the interviewees
5 units = 60
1 unit = 60 ÷ 5 = 12
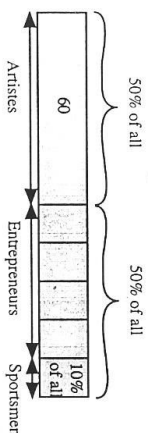
Number of interviewees who aspire to become entrepreneurs = 4 units = 4 × 12 = 48.

Solution to Question 3

Men: (2 units) 50, 20

Women: 50 (5 units, 3 units)

2 units = 50 − 20 = 30
1 unit = 15

Number of women at the conference at first
= 5 units = 5 × 15 = 75.

Solution to Question 1
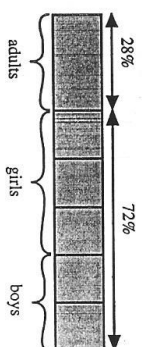
Girls: (Year 1, Year 2)

Boys:

Number of Year 1 helpers = 7 units.
Number of Year 2 helpers = 8 units.

8 units − 7 units = 9 helpers
1 unit = 9 helpers

Number of students helping out in the project = 15 units = 15 × 9 = 135.

Solution to Question 2

28% | 72%
adults | girls | boys

Number of children = 5 units
= 5 × 72 = 360.

Since there were 216 girls, we have:
3 units = 216
1 unit = 72

72% of all the people = 360
1% of all the people = 360 ÷ 72 = 5
100% of all the people = 5 × 100 = 500.

Therefore, total number of people at the carnival = 500.

Solution to Question 3

At first
Boys:
Girls:

After
Boys: 30
Girls: 30, 30

5 units + 75 = 6 units + 60
1 unit = 15

Number of students at Metta School at first = 8 units = 8 × 15 = 120.

No. of boys = 2 × No. of girls