

## Answer on Question #76180 – Math – Statistics and Probability

### Question

In a class of 20 children, 4 of the 9 boys and 3 of the 11 girls are in the athletics team. A person from the class is chosen to be in the 'egg and spoon' race on sport Day. Find the probability that the person chosen is

- 4.1 in the athletics (5)
- 4.2 female (5)
- 4.3 a female member of the athletics team (5)

### Solution

4.1.

$$P(A) = \frac{n(A)}{N} = \frac{4 + 3}{20} = \frac{7}{20} = 0.35$$

4.2.

$$P(F) = \frac{n(F)}{N} = \frac{11}{20} = 0.55$$

4.3.

$$P(F \cap A) = \frac{n(F \cap A)}{N} = \frac{3}{20} = 0.15$$

**Answer:** 4.1  $P(A)=0.35$ ; 4.2  $P(F)=0.55$ ; 4.3  $P(F \cap A) = 0.15$ .