

Venn Diagrams Worksheet

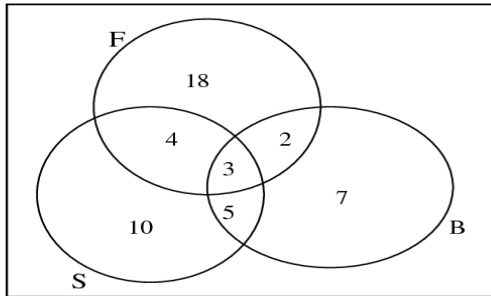
PMath 12

1. Three of the top Canadian paid-circulation magazines are Reader's Digest, Chatelaine, and MacLean's. A market survey has estimated the probability of a household subscribing to these magazines:

Subscription	Probability
Reader's Digest	0.6
Chatelaine	0.5
MacLean's	0.4
Reader's Digest & Chatelaine	0.2
Reader's Digest & MacLean's	0.25
Chatelaine & MacLean's	0.15
All three	0.05

What is the probability that a household chosen at random

- a) subscribes to only Reader's Digest?
 - b) subscribes to neither Chatelaine nor MacLean's?
 - c) subscribes to one magazine only?
2. A group of 60 students were asked if they played fieldhockey (F), basketball (B) or soccer (S). The diagram below displays the results.



What percent of the group play:

- a) field hockey & basketball?
- b) field hockey or basketball?
- c) field hockey & soccer?
- d) neither of the three sports?
- e) only 1 sport?