

6. A survey of 500 television watchers produced the following information:
- 285 watch football games. 195 watch hockey games.
  - 115 watch basketball games.
  - 45 watch football and basketball games.
  - 70 watch football and hockey games.
  - 50 watch hockey and basketball games.
  - 50 do not watch any of the three games.
- a) How many people in the survey watch all three games?  
b) How many people watch exactly one of the three games?
- 15 points
7. Show that there are at least 6 different ways to choose three numbers from 1 to 10 so that all choice have the same sum.
- 10 points