3.4 1,3,12,13,20a,21,22,23,27,33

1. {HHH, HHT, HTT, HTH, HTT, THH, THT, TTH, TTT}

3. {sb, sr, sg, cb, cr, cg}

12. a) 12/52
    b) 15/52   20 even-5 heart
    c) 29/52   20 odd + 13 Heart -4 heart odd

13. D

20. a) 1/10000   1/10 · 1/10 · 1/10 · 1/10 =

21. a) 10/18   2/18 · 4/18 · 4/18
    b) 11/18   2/18 + 4/18 + 4/18
    c) 12/18   2/18 + 3/18 + 4/18 + 3/18
    d) 9/18   3 + 4 + 2

22. a) 1/2
    b) 1/2
    c) 4/6
    d) 1/2

23. a) .7   1-.3
    b) 0
    c) .7   .3 + .4
    d) 1

27. 10/32

33. a) 35/220
    b) 80/220
    c) 210/220
    d) 210/220