

① $366 \text{ day} = (52 \text{ Week}) \times (7 \text{ days}) + 2$, the start and end can be:
 $\{(\text{Sat} \rightarrow \text{sun}), (\text{sun} \rightarrow \text{mon}), (\text{mon} \rightarrow \text{tue}), (\text{tue} \rightarrow \text{wed}), (\text{wed} \rightarrow \text{thu}), (\text{thu} \rightarrow \text{fri}), (\text{fri} \rightarrow \text{sat})\} \rightarrow \text{So } P(\text{Leap year having 53 Sunday})$
 $= \frac{2}{7} \rightarrow (C)$

② $0/5 \rightarrow C$

③ $1 - 0.85 = \frac{3}{20} \rightarrow C$

④ $\frac{3}{15} = \frac{1}{5} \rightarrow a$

⑤ $2^3 = 8 \rightarrow C$

⑥ $11/35 \rightarrow b$

⑦ $1 \rightarrow b$

⑧ $1/5 \rightarrow C$

⑨ $\frac{3C2 + 3C3}{8} = \frac{4}{8} \Rightarrow \frac{1}{2} \rightarrow C$

⑩ $6/13 \rightarrow a$

⑪ $\frac{3}{6} = \frac{1}{2} \rightarrow D$

⑫ $1/4 \rightarrow B$

⑬ $\frac{4}{36} = \frac{1}{9} \rightarrow C$

⑭ $1/4 \rightarrow C$

⑮ $P(b) = 2P(r), \frac{x}{5+x} = 2 \times \frac{10}{5+x}, x = 10 \rightarrow B$

⑯ $\frac{588}{600} = \frac{49}{50} = \frac{147}{150} \rightarrow B$

⑰ $\frac{9}{100} \rightarrow A$

⑱ $2/7 \rightarrow C$

⑲ $\frac{2}{52} = \frac{1}{26} \rightarrow A$

⑳ $\rightarrow P(\text{odd}) = \frac{6}{12} = \frac{1}{2}$

㉑ $P(\text{win}) = \frac{2}{8} = \frac{1}{4}, P(\text{lose}) = \frac{3}{4} \rightarrow A$

㉒ $\frac{365}{365^2} = \frac{1}{365} \rightarrow C$

㉓ $\frac{3}{5} \rightarrow C$

㉔ $P(r) = \frac{r - \text{marbles}}{24} = 2/3 \rightarrow r - \text{marbles} = 16 \rightarrow \text{White} = 8 \rightarrow C$

㉕ $2/25 \rightarrow D$

㉖ $9/21 \rightarrow d$

㉗ $25.79 \rightarrow a$

㉘ $13, 18 \rightarrow b$

㉙ $\frac{1}{2} \rightarrow a$

㉚ $9 \rightarrow d$

㉛ $7 \rightarrow d$

㉜ $P(x) = -0.5$

㉝ $2 \rightarrow a$

㉞ $0 \rightarrow b$

㉟ $3 \rightarrow C$

㊱ $2 \rightarrow d$

㊲ $1 \rightarrow C$

㊳ $0.4, 0.24 \rightarrow a$

㊴ $6, 2.4 \rightarrow b$

㊵ $4 \rightarrow b$

41 Mean is 0 and Variance is 1 $\rightarrow a$

42 $E(X^2) - (E(X))^2 \rightarrow c$

43 $E(X) \rightarrow a$

44 $a \rightarrow b$

45 $0 \rightarrow a$

46 $2, 4/3 \rightarrow a$

47 $1.5 \rightarrow b$

48 $npq \rightarrow b$

49 $P(X=x) = nC_x P^x q^{(n-x)}$

50 $\sqrt{npq} \rightarrow d$