

Problem 4

d)

For $i = 6, 7$, we have 7 starts

Otherwise,

If $i = 1$, then print n starts

If $i = 2$, then print $2n$ starts

If $i = 3$, then print $3n-1$ starts

If $i = 4$, then print $4n-1$ starts

If $i = 5$, then print $5n-2$ starts

Generally, the expected number of starts should be $\frac{2}{7} * 7 + \frac{1}{7} * n + \frac{1}{7} * 2n + \frac{1}{7} * (3n - 1) + \frac{1}{7} * (4n - 1) + \frac{1}{7} * (5n - 2) = \frac{15n+9}{7}$ starts