2.29 1) $\binom{10}{6}\left(\frac{3}{5}\right)^6\left(1-\frac{3}{5}\right)^{10-6} = \frac{10!}{6!\,(10-6)!}\left(\frac{3}{5}\right)^6\left(\frac{2}{5}\right)^4 = 210 \cdot \frac{729}{15\ 625} \cdot \frac{16}{625} =$
$\frac{489\ 888}{1\ 953\ 125} \approx 25{,}08\ \%$

2) On obtient entre 5 et 7 fois pile, si l'on obtient exactement 5 OU exactement 6 OU exactement 7 fois pile.
$\binom{10}{5}\left(\frac{3}{5}\right)^5\left(1-\frac{3}{5}\right)^{10-5}+\binom{10}{6}\left(\frac{3}{5}\right)^6\left(1-\frac{3}{5}\right)^{10-6}+\binom{10}{7}\left(\frac{3}{5}\right)^7\left(1-\frac{3}{5}\right)^{10-7} =$
$\frac{10!}{5!\,(10-5)!}\left(\frac{3}{5}\right)^5\left(\frac{2}{5}\right)^5 + \frac{10!}{6!\,(10-6)!}\left(\frac{3}{5}\right)^6\left(\frac{2}{5}\right)^4 + \frac{10!}{7!\,(10-7)!}\left(\frac{3}{5}\right)^7\left(\frac{2}{5}\right)^3 =$
$252 \cdot \frac{243}{3125} \cdot \frac{32}{3125} + 210 \cdot \frac{729}{15\ 625} \cdot \frac{16}{625} + 120 \cdot \frac{2187}{78\ 125} \cdot \frac{8}{125} =$
$\frac{1\ 959\ 552}{9\ 765\ 625} + \frac{489\ 888}{1\ 953\ 125} + \frac{419\ 904}{1\ 953\ 125} = \frac{6\ 508\ 512}{9\ 765\ 625} \approx 66{,}65\ \%$