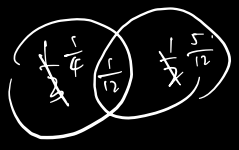
$$\frac{1}{3}+\frac{1}{2}-\frac{1}{12}=\frac{10}{12}-\frac{1}{11}=\frac{9}{12}$$

$P(\bar{A}B)$



AB

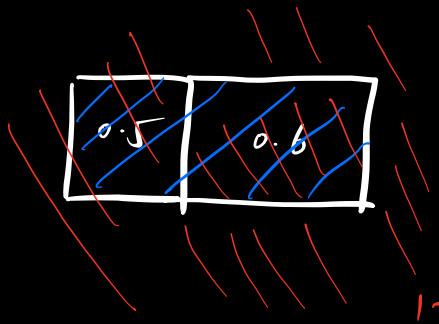
$\frac{1}{12}$ $\frac{1}{2}+\frac{5}{9}=\frac{3}{4}$

$\frac{1}{\sqrt{2\pi}\sigma}e^{-\frac{(x-\mu)^2}{2\sigma^2}}$ $\mu=20$ $\sigma=40$.

$-30<X<30$

$-\frac{5}{4}<\frac{X-20}{40}<\frac{1}{4}$

0.599



$P(B|A)=\frac{P(AB)}{P(A)}$

$A\cap B \mid A\cup B$

$1-\frac{P(A\cap B\cap(A\cup B))}{P(A\cup B)}$.

$AB\cdot(A+B)$

$AB+\bar{A}B$

$=1-\frac{P(AB)}{P(A+B)}$

$=1-\frac{0.5\times0.6}{0.5+0.6-0.3}$

$1-e^{-\frac{x}{200}}$

$1-e^{-\frac{150}{200}}$

$0.6x$

$\frac{1}{121}f(\frac{n+1}{2})$

$\geq 1-\frac{\lambda}{9\lambda}=1-\frac{1}{9}$

$4+2X-Y \sim N(1, 16)$

$\frac{X-\mu}{\sigma}$

$EM^2 = DM + E^2M$

$= 16 + 1 = 17$

$\frac{cov(2X-Y,\ X+Y)}{4\times 4} = \frac{1}{16}\left(2DX + cov(X,Y) - DY\right)$

$2DX \to 0$, $cov(X,Y) \to 2$, $DY \to 16$

$0.5 = \frac{cov}{4}$

$= \frac{1}{16}\cdot(-14)$

$= -\frac{7}{8}$

$E(\bar{x} - ks^2)$

$= \mu - k\sigma = mp - kmp(1-p) = mp^2$

$1 - k(1-p) = p$

$k = 1.$

$\frac{\bar{x}-\mu}{2/\sqrt{n}} \sim N(0,1)$

$EX^2 \neq 1.$

$1 = ?-0$

$= E\left|\frac{\bar{x}-\mu}{2/\sqrt{n}}\right|^2 \leq \frac{0.1}{4}n$

$= 1.$

$n \geq 40$

$E\bar{X} = 1$

$D\bar{X} = \frac{1}{n}\cdot\frac{1}{12} = \frac{1}{3n} = E\bar{X}^2 - 1.$