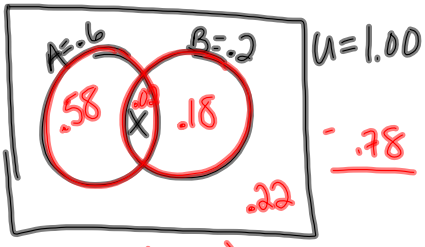
$P(A|B) = .1$

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

$\frac{.1}{1} = \frac{X}{.2}$

$X = .02$



a) $P(A \cap B) = .02$

b) $P(A \cup B) = .78$

c) $P(A \cap B') + P(B \cap A')$

$.58 + .18$

$.76$

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

$= \frac{.02}{.6}$

$= .033$

Oct 20-4:31 PM

$D = 3C$

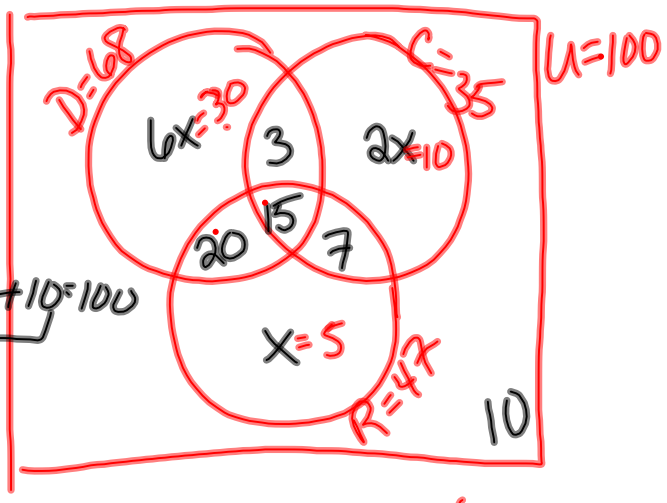
$C = 2R$

$6x + 2x + x + 3 + 7 + 20 + 15 + 10 = 100$

$9x + 55 = 100$

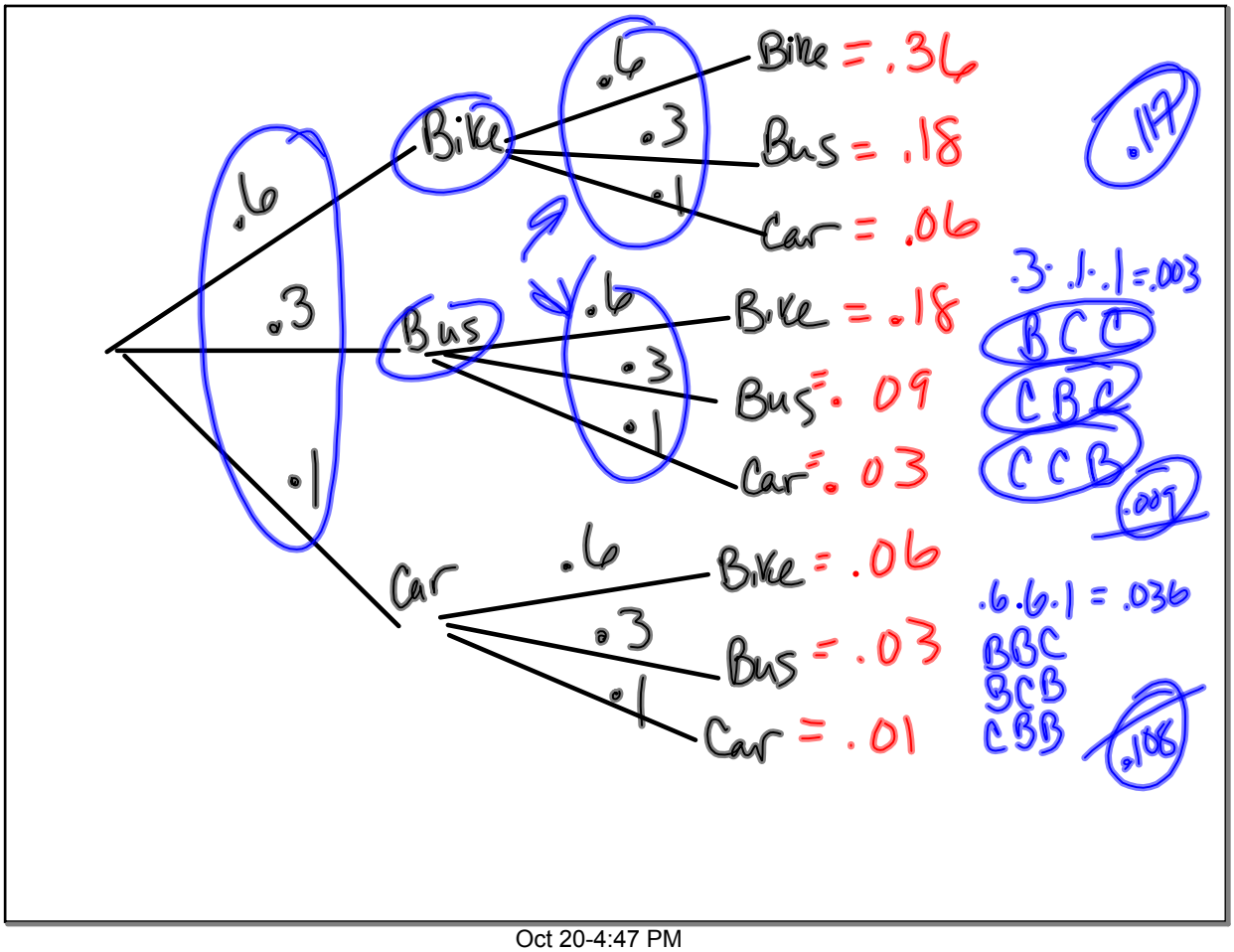
$9x = 45$

$x = 5$

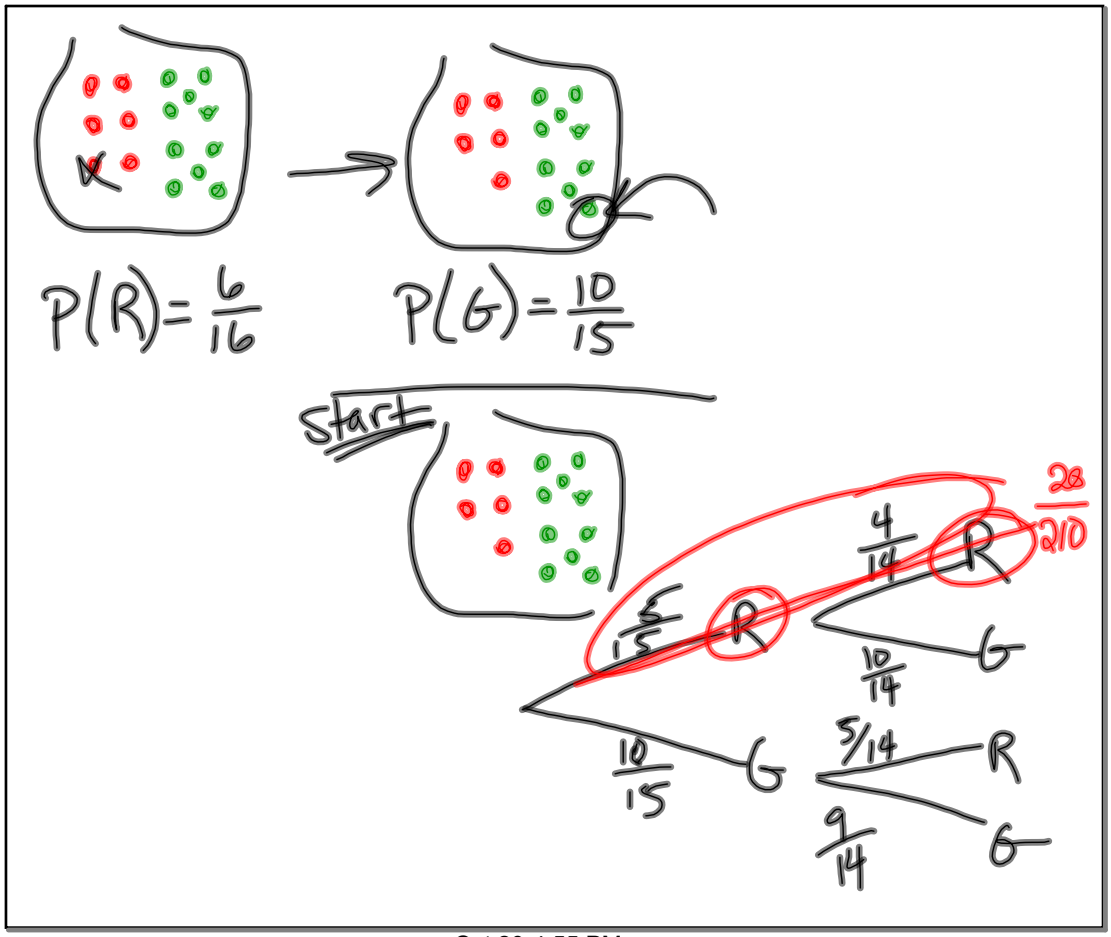


Drama only = $6x$

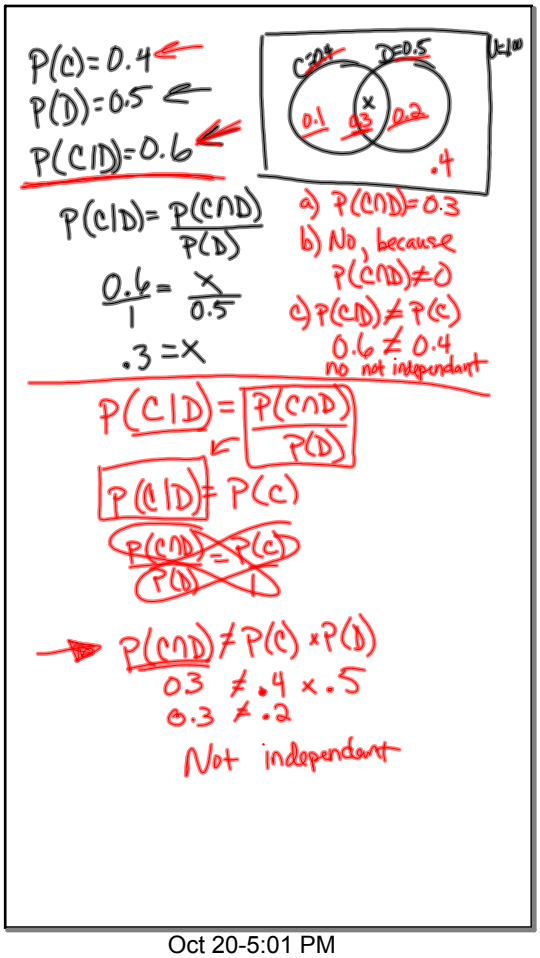
Oct 20-4:40 PM



Oct 20-4:47 PM



Oct 20-4:55 PM


P(C) = 0.4
P(D) = 0.5
P(C|D) = 0.6
P(C|D) = P(C∩D) / P(D)
0.6/1 = x/0.5
.3 = x
C=0.4
D=0.5
U=1
0.1
x
0.2
.4
a) P(C∩D) = 0.3
b) No, because P(C∩D) ≠ 0
c) P(C|D) ≠ P(C)
0.6 ≠ 0.4
no not independant
P(C|D) = P(C∩D) / P(D)
P(C|D) ≠ P(C)
P(C∩D) = P(C) / P(D)
P(C∩D) ≠ P(C) × P(D)
.3 ≠ .4 × .5
0.3 ≠ .2
Not independant

Oct 20-5:01 PM