

Name: _____

AP STatistics / Mr. Hansen
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Pop Quiz (Block 4)

Given: $T = N(4, 3)$

$U = B(6, .5)$

$V = G(.9)$

Also given: U and V are independent. (In Block 3, T and U were given to be independent, which made the last 2 entries in the table “can’t say.”)

Compute the mean, s.d., and variance of each of the following:

	mean	s.d.	variance
T	4	3	9
U	$np = 3$	$\sqrt{1.5}$	1.5
V	$\frac{1}{p} = \frac{10}{9}$	$\sqrt{\frac{.1}{.9^2}} = \sqrt{\frac{10}{81}}$	$\frac{.1}{.9^2} = \frac{10}{81}$
$2T + 3$	11	6	36
$T + 2U$	10	can’t say	can’t say
$U - V$	$\frac{17}{9}$	$\sqrt{1.5 + \frac{10}{81}}$	$1.5 + \frac{10}{81}$