**AP Statistics – Rules for adding, subtracting, and scalar multiplication of means and variances**

|  |  |  |
| --- | --- | --- |
| Random Variables | Mean  | Standard deviation |
| X | 10 | 2 |
| Y | 20 | 5 |
| 3X |  |  |
| Y+5 |  |  |
| X+Y |  |  |
| X-Y |  |  |

|  |  |  |
| --- | --- | --- |
| Random Variables | Mean  | Standard deviation |
| X | 120 | 12 |
| Y | 300 | 16 |
| 0.8Y |  |  |
| 2X-100 |  |  |
| X+2Y |  |  |
| 3X-Y |  |  |

|  |  |  |
| --- | --- | --- |
| Random Variables | Mean  | Standard deviation |
| X | $5.10 | $1.60 |
| Y | $18.50 | $3.25 |
| 2Y+20 |  |  |
| 4X |  |  |
| 0.25X+1.5Y |  |  |
| X-5Y |  |  |