

Σ ed 3 Ex 7.05

x	0	1	2	3	4	5
$P(X=x)$	0.1	0.2	<del>0.3</del>	0.3	0.1	0.1
$x \cdot P(x)$	0	0.2	0.4	0.9	0.4	0.5
$X - \mu$	-2.4	-1.4	-0.4	0.6	1.6	2.6
$(X - \mu)^2$	5.76	1.96	0.16	0.36	2.56	6.76
$(X - \mu)^2 \cdot P(x)$	0.576	0.392	0.032	<u>0.048</u>	0.256	0.676

$$\mu = 2.4$$

$$\Sigma = \cancel{1.98} = \text{VAR}(X)$$

$$2.04$$

$$= 0.06$$

$$\text{VAR}(3X) = 3^2 \text{VAR}(X)$$

$$= 9 \times 7$$

$$= 63$$

$$2. \quad \sigma = 7.5$$

$$\Rightarrow \text{VAR}(X) = 7.5^2$$

$$= 56.25$$

$$\sigma(X+4) = 7.5$$