

$\Sigma$  ed. 2, Ex. 24

Q5 Know  $E(X) = 5.35$   $E(X^2) = 30.65$

c)  $E[(2X-3)^2]$

$$\rightarrow E(4X^2 - 12X + 9)$$

$$\rightarrow 4E(X^2) - 12E(X) + 9$$

$$= 4 \cdot 30.65 - 12 \cdot 5.35 + 9$$

$$= 122.6 - 64.2 + 9$$

$$= \underline{67.4}$$

Q6 c)  $E\left(\frac{4-X}{1+2X}\right)$

X	-2	-1	0	1	2
P(X)	0.1	0.2	0.4	0.2	0.1
4-X	6	5	4	3	2
1+2X	-3	-1	1	3	5
$\div$	-2	-5	4	1	0.4
$\times P(X)$	<del>0.2</del>	-1.0	1.6	<del>0.2</del>	0.04

$\Sigma = \underline{0.64}$