Updated Key for CSE 21, Quiz 5, Question 2, Part (c)

(c) $\sigma_x^2 = (-2)^2(.4) + (1)^2(.1) + (3)^2(.3) + (4)^2 - (\mu_x^2) = (6.6) - (1.0)^2 = 6.6 \Longrightarrow \sigma_x \doteq 2.6$

$\sigma_y^2 = 0.24 \Longrightarrow \sigma_y \doteq 0.24$

$\rho(X,Y) = \frac{Cov(X,Y)}{\sigma_x \sigma_y} \doteq \frac{(0.1)}{(2.6)(0.5)} \doteq 0.08$