

35. Correct. The answer is true. The sum of the probabilities must be 1:

$$P(X_3) = 1 - P(X_1) - P(X_2)$$

$$P(X_3) = 1 - 0.55 - 0.15$$

$$P(X_3) = 0.30$$

$$E[MC] = MC1 * P(X_1) + MC2 * P(X_2) + MC3 * P(X_3)$$

$$= (5 + (1/10)A) * (0.55) + (10 + (1/8) A) * (0.15) + (7 + (1/9) A) * (0.30)$$

$$E[MC] = 6.35 + 0.107A.$$