6. (1) 是，離散的

(2) $X \sim B(10, 0.5)$, $P(X \geq 6) = 1 - P(X \leq 5) = 1 - 0.623 = 0.377$

(3) $P(X \leq 4) = 0.377$

34. (1) $P(X=0) = \dfrac{e^{-0.5} \, 0.5^0}{0!} = e^{-0.5} = 0.6065$

(2) $P(X \geq 1) = 1 - P(X=0) = 1 - e^{-0.5} = 0.3935$

35 (1) $P(X=0) = \dfrac{e^{-3} \, 3^0}{0!} = 0.0498$

(2) $P(X=2) = \dfrac{e^{-3} \, 3^2}{2!} = 0.224$

39. $P(X>8) = P\left(Z > \dfrac{8-5}{3.5}\right) = P(Z > 0.86) = |1 - 0.806| = 0.1949$

8 (1) $P(X > 15) = P\left(\dfrac{X - 13.2}{5.3} > \dfrac{15 - 13.2}{5.3}\right)$

$= P(Z > 0.34) = 1 - P(Z \leq 0.34)$

$= 1 - 0.633$

(2) $P(\bar{X} > 15)\ P\left\{\dfrac{\bar{X} - 13.2}{\frac{5.3}{\sqrt{16}}} > \dfrac{15 - 13.2}{\frac{5.3}{\sqrt{16}}}\right\} = P(Z > 1.36) = 1 - P \cdot Z(1.36)$

$= 1 - 0.913 = 0.0869$