

APA quiz 10: solutions

1. b), c), e)

2. a) $X \equiv 1$

d) $X \equiv 2$

e) $X = \begin{cases} 1 & \text{wp } 1/2 \\ 0 & \text{wp } 1/2 \end{cases}$

f) $X \equiv -1$

3. b) $X = \begin{cases} +10 & \text{wp } 1/2 \\ -10 & \text{wp } 1/2 \end{cases}$

c) $X \sim \mathcal{E}(1)$

e) $X \equiv -c$

f) $X \sim \mathcal{U}([0, 1])$

4. d) [NB: the inequalities in e) & f) are wrong]

(b) $m_0 \neq 1$
c) $m_1 = 2 \neq \sqrt{m_2} = \sqrt{3}$)

(a) the dist. can be "anything"
d) $X \sim e^{N/10}$, $N \sim N(0, 1)$
or other distributions)