

4 a) $P(X \geq 1) = 0.9$

b) The event $X \leq 2$ is "at most nonword errors"

$$P(X \leq 2) = 0.6 . P(X < 2) = 0.3$$

6 a) all of the probabilities are between 0 \leq 1 and sum to 1

b) Histogram shows strongly right skewed distribution with peak at 0 days

8 a) outcomes that make up event $A = 1, 2, 3, 4, 5, 6, 7$

$$P(A) = 0.32$$

b) outcomes for event $B = 0, 1, 2, 3, 4$ $P(B) = 0.93$

c) outcomes for $A \cap B = 1, 2, 3, 4$ $P(A \cap B) = 0.25$
 not the same as $P(A) \cdot P(B) = 0.2976$ b/c $A \cap B$
 are not independent