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Statistics MCQs – Basic Probability Part 6

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101. You are given the following: $P(A \text{ and } E) = 0.17$, $P(\bar{A} \text{ and } E) = 0.33$, $P(A \text{ and } \bar{E}) = 0.20$ and $P(\bar{A} \text{ and } \bar{E}) = 0.3$. What is $P(\bar{E} | A)$?

- a. 0.50
- b. 0.43
- c. 0.41
- d. 0.54
- e. 0.48

Answer: D

102. You are given the following: $P(A \text{ and } E) = 0.16$, $P(\bar{A} \text{ and } E) = 0.32$, $P(A \text{ and } \bar{E}) = 0.12$ and $P(\bar{A} \text{ and } \bar{E}) = 0.40$. What is $P(\bar{E} | A)$?

- a. 0.50
- b. 0.43
- c. 0.41
- d. 0.54
- e. 0.48

Answer: B

103. You are given the following: $P(A \text{ and } B) = 0.17$, $P(\bar{A} \text{ and } E) = 0.32$, $P(A \text{ and } \bar{E}) = 0.17$ and $P(\bar{A} \text{ and } \bar{E}) = 0.34$. What is $P(A | \bar{E})$?

- a. 0.33
- b. 0.31
- c. 0.30
- d. 0.40

e. 0.23

Answer: A

104. You are given the following: $P(A \text{ and } E) = 0.20$, $P(\bar{A} \text{ and } E) = 0.32$, $P(A \text{ and } \bar{E}) = 0.15$ and $P(\bar{A} \text{ and } \bar{E}) = 0.33$. What is $P(A | \bar{E})$?

a. 0.33

b. 0.31

c. 0.30

d. 0.40

e. 0.23

Answer: B

105. You are given the following: $P(A \text{ and } E) = 0.19$, $P(\bar{A} \text{ and } E) = 0.38$, $P(A \text{ and } \bar{E}) = 0.13$ and $P(\bar{A} \text{ and } \bar{E}) = 0.30$. What is $P(A | \bar{E})$?

a. 0.33

b. 0.31

c. 0.30

d. 0.40

e. 0.23

Answer: C

106. You are given the following: $P(A \text{ and } E) = 0.17$, $P(\bar{A} \text{ and } E) = 0.33$, $P(A \text{ and } \bar{E}) = 0.20$ and $P(\bar{A} \text{ and } \bar{E}) = 0.3$. What is $P(A | \bar{E})$?

a. 0.33

b. 0.31

c. 0.30

d. 0.40

e. 0.23

Answer: D

107. You are given the following: $P(A \text{ and } E) = 0.16$, $P(\bar{A} \text{ and } E) = 0.32$, $P(A \text{ and } \bar{E}) = 0.12$ and $P(\bar{A} \text{ and } \bar{E}) = 0.40$. What is $P(A | \bar{E})$?

a. 0.33

b. 0.31

- c. 0.30
- d. 0.40
- e. 0.23

Answer: E

108. You are given the following: $P(A \text{ and } B) = 0.17$, $P(\bar{A} \text{ and } E) = 0.32$, $P(A \text{ and } \bar{E}) = 0.17$ and $P(\bar{A} \text{ and } \bar{E}) = 0.34$. What is $P(E | \bar{A})$?

- a. 0.48
- b. 0.49
- c. 0.56
- d. 0.52
- e. 0.44

Answer: A

109. You are given the following: $P(A \text{ and } E) = 0.20$, $P(\bar{A} \text{ and } E) = 0.32$, $P(A \text{ and } \bar{E}) = 0.15$ and $P(\bar{A} \text{ and } \bar{E}) = 0.33$. What is $P(E | \bar{A})$?

- a. 0.48
- b. 0.49
- c. 0.56
- d. 0.52
- e. 0.44

Answer: B

110. You are given the following: $P(A \text{ and } E) = 0.19$, $P(\bar{A} \text{ and } E) = 0.38$, $P(A \text{ and } \bar{E}) = 0.13$ and $P(\bar{A} \text{ and } \bar{E}) = 0.30$. What is $P(E | \bar{A})$?

- a. 0.48
- b. 0.49
- c. 0.56
- d. 0.52
- e. 0.44

Answer: C

111. You are given the following: $P(A \text{ and } E) = 0.17$, $P(\bar{A} \text{ and } E) = 0.33$, $P(A \text{ and } \bar{E}) = 0.20$ and $P(\bar{A} \text{ and } \bar{E}) = 0.3$. What is $P(E | \bar{A})$?

- a. 0.48
- b. 0.49
- c. 0.56
- d. 0.52
- e. 0.44

Answer: D

112. You are given the following: $P(A \text{ and } E) = 0.16$, $P(\bar{A} \text{ and } E) = 0.32$, $P(A \text{ and } \bar{E}) = 0.12$ and $P(\bar{A} \text{ and } \bar{E}) = 0.40$. What is $P(E | \bar{A})$?

- a. 0.48
- b. 0.49
- c. 0.56
- d. 0.52
- e. 0.44

Answer: E

113. There is a 45 % chance of John passing mathematics. There is a 35 % chance that John will pass both mathematics and statistics. There is a 70 % chance that he will pass either mathematics or statistics or both. John has been informed that he has passed statistics, what is the probability that he will pass mathematics?

- a. 0.58
- b. 0.88
- c. 0.55
- d. 0.70
- e. 0.15

Answer: A

114. There is a 65 % chance of John passing mathematics. There is a 35 % chance that John will pass both mathematics and statistics. There is a 70 % chance that he will pass either mathematics or statistics or both. John has been informed that he has passed statistics, what is the probability that he will pass mathematics?

- a. 0.58
- b. 0.88
- c. 0.55

d. 0.70

e. 0.15

Answer: B

115. There is a 45 % chance of John passing mathematics. There is a 30 % chance that John will pass both mathematics and statistics. There is a 70 % chance that he will pass either mathematics or statistics or both. John has been informed that he has passed statistics, what is the probability that he will pass mathematics?

a. 0.58

b. 0.88

c. 0.55

d. 0.70

e. 0.15

Answer: C

116. There is a 45 % chance of John passing mathematics. There is a 35 % chance that John will pass both mathematics and statistics. There is a 60 % chance that he will pass either mathematics or statistics or both. John has been informed that he has passed statistics, what is the probability that he will pass mathematics?

a. 0.58

b. 0.88

c. 0.55

d. 0.70

e. 0.15

Answer: D

117. There is a 45 % chance of Aisha passing economics. There is a 35 % chance that Aisha will pass both economics and accounting. There is a 80 % chance that she will pass either economics or accounting or both. Aisha has been informed that she has passed accounting, what is the probability that she will pass economics?

a. 0.50

b. 0.62

c. 0.64

d. 0.44

e. 0.15

Answer: A

118. There is a 45 % chance of Aisha passing economics. There is a 40 % chance that Aisha will pass both economics and accounting. There is a 70 % chance that she will pass either economics or accounting or both. Aisha has been informed that she has passed accounting, what is the probability that she will pass economics?

- a. 0.50
- b. 0.62
- c. 0.64
- d. 0.44
- e. 0.15

Answer: B

119. There is a 50 % chance of Aisha passing economics. There is a 35 % chance that Aisha will pass both economics and accounting. There is a 70 % chance that she will pass either economics or accounting or both. Aisha has been informed that she has passed accounting, what is the probability that she will pass economics?

- a. 0.50
- b. 0.62
- c. 0.64
- d. 0.44
- e. 0.15

Answer: C

120. There is a 45 % chance of Aisha passing economics. There is a 20 % chance that Aisha will pass both economics and accounting. There is a 70 % chance that she will pass either economics or accounting or both. Aisha has been informed that she has passed accounting, what is the probability that she will pass economics?

- a. 0.50
- b. 0.62
- c. 0.64
- d. 0.44
- e. 0.15

Answer: D

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