

Name: _____ Quiz Score: _____/20

Quiz 5: Version A*No credit for answers without sufficient justification. Use standard mathematical notation correctly.***NO CALCULATORS ALLOWED.**

1. (14 pts) Eleven web sites are entered in a web design contest. *For each of the following, first give your answer in symbolic form (${}_nP_r$ or ${}_nC_r$), then evaluate without using a calculator.*

(a) In how many ways can one choose the top three sites regardless of order?

(b) In how many ways can one choose the first-, second-, and third-place winners?

2. (6 pts) Consider the sample space $S = \{o_1, o_2, o_3, o_4\}$. Suppose $\Pr(o_1) = 0.30$ and $\Pr(o_2) = 0.26$. If o_3 and o_4 are equally likely, complete the probability assignment for this probability space.

$\Pr(o_1) = 0.30$

$\Pr(o_2) = 0.26$

$\Pr(o_3) = \underline{\hspace{2cm}}$

$\Pr(o_4) = \underline{\hspace{2cm}}$

Name: _____ Quiz Score: _____/20

Quiz 5: Version B

No credit for answers without sufficient justification. Use standard mathematical notation correctly.

NO CALCULATORS ALLOWED.

1. (14 pts) Nine web sites are entered in a web design contest. *For each of the following, first give your answer in symbolic form (${}_nP_r$ or ${}_nC_r$), then evaluate without using a calculator.*

(a) In how many ways can one choose the top three sites regardless of order?

(b) In how many ways can one choose the first-, second-, and third-place winners?

2. (6 pts) Consider the sample space $S = \{o_1, o_2, o_3, o_4\}$. Suppose $\Pr(o_1) = 0.12$ and $\Pr(o_2) = 0.26$. If o_3 and o_4 are equally likely, complete the probability assignment for this probability space.

$\Pr(o_1) = 0.12$

$\Pr(o_2) = 0.26$

$\Pr(o_3) = \underline{\hspace{2cm}}$

$\Pr(o_4) = \underline{\hspace{2cm}}$

Name: _____ Quiz Score: _____/20

Quiz 5: Version C*No credit for answers without sufficient justification. Use standard mathematical notation correctly.***NO CALCULATORS ALLOWED.**

1. (14 pts) Eight web sites are entered in a web design contest. *For each of the following, first give your answer in symbolic form (${}_nP_r$ or ${}_nC_r$), then evaluate without using a calculator.*

(a) In how many ways can one choose the top three sites regardless of order?

(b) In how many ways can one choose the first-, second-, and third-place winners?

2. (6 pts) Consider the sample space $S = \{o_1, o_2, o_3, o_4\}$. Suppose $\Pr(o_1) = 0.21$ and $\Pr(o_2) = 0.43$. If o_3 and o_4 are equally likely, complete the probability assignment for this probability space.

$\Pr(o_1) = 0.21$

$\Pr(o_2) = 0.43$

$\Pr(o_3) = \underline{\hspace{2cm}}$

$\Pr(o_4) = \underline{\hspace{2cm}}$

Name: _____ Quiz Score: _____/20

Quiz 5: Version D

No credit for answers without sufficient justification. Use standard mathematical notation correctly.

NO CALCULATORS ALLOWED.

1. (14 pts) Ten web sites are entered in a web design contest. *For each of the following, first give your answer in symbolic form (${}_nP_r$ or ${}_nC_r$), then evaluate without using a calculator.*

(a) In how many ways can one choose the top three sites regardless of order?

(b) In how many ways can one choose the first-, second-, and third-place winners?

2. (6 pts) Consider the sample space $S = \{o_1, o_2, o_3, o_4\}$. Suppose $\Pr(o_1) = 0.33$ and $\Pr(o_2) = 0.25$. If o_3 and o_4 are equally likely, complete the probability assignment for this probability space.

$\Pr(o_1) = 0.33$

$\Pr(o_2) = 0.25$

$\Pr(o_3) = \underline{\hspace{2cm}}$

$\Pr(o_4) = \underline{\hspace{2cm}}$