$\qquad$

1. This problem concerns lists made from the five symbols $\mathrm{C}, \mathrm{O}, \mathrm{U}, \mathrm{N}, \mathrm{T}$.
(a) How many length-4 lists are there if repetition is allowed?
(b) How many length-4 lists are there if repetition is not allowed?
(c) How many length-4 lists are there if repetition is allowed, and the first two entries are vowels?
(d) How many length-4 lists are there if repetition is not allowed, and the first two entries are vowels?

Name: $\qquad$


1. This problem concerns lists made from the five digits $1,2,3,4,5$.
(a) How many length-4 lists are there if repetition is not allowed?
(b) How many length-4 lists are there if repetition is allowed?
(c) How many length-4 lists are there if repetition is allowed, and the first two entries are odd?
(d) How many length-4 lists are there if repetition is not allowed, and the first two entries odd?

## Name:

$\qquad$

1. This problem concerns lists made from the five digits $1,2,3,4,5$.
(a) How many length-4 lists are there if repetition is not allowed?
(b) How many length-4 lists are there if repetition is allowed?
(c) How many length-4 lists are there if repetition is allowed, and the first two entries are even?
(d) How many length-4 lists are there if repetition is not allowed, and the first two entries even?

Name: $\quad$ QuIZ 8 \begin{tabular}{c}
MATH 2m <br>
ACE

$\quad$

MATH 211 <br>
February 14, 2023
\end{tabular}

1. This problem concerns lists made from the six symbols $L, I, S, T, E, D$.
(a) How many length-4 lists are there if repetition is allowed?
(b) How many length-4 lists are there if repetition is not allowed?
(c) How many length-4 lists are there if repetition is allowed, and the first two entries are vowels?
(d) How many length-4 lists are there if repetition is not allowed, and the first two entries are vowels?
